

Volume 5 | Map books

Cultural Heritage - Euston and London Metropolitan (Part 1 of 4)

November 2013 ES 3.5.1.4.1



High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

A report prepared for High Speed Two (HS2) Limited:

ARUP

ATKINS

CAPITA



ineco



PARSONS BRINCKERHOFF





High Speed Two (HS2) Limited, Eland House, Bressenden Place, London SW1E 5DU

Details of how to obtain further copies are available from HS2 Ltd.

Telephone: 020 7944 4908

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.hs2.org.uk

High Speed Two (HS2) Limited has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the HS2 website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact High Speed Two (HS2) Limited.



Printed in Great Britain on paper containing at least 75% recycled fibre.

Contents

Mapping explanatory notes

Data dictionary and definitions

Map series name	CH-01 — Heritage Assets within Study Area	CH-02 — Designated Heritage Assets	CH-o3 – Archaeological Character Sub-zones	
Map series description	Designated and non-designated assets in relation to the land required for the construction of the Proposed Scheme, plus 500m in rural areas and 250m in urban	Designated assets within the zone of theoretical visibility (ZTV) and/or up to 2km away from the alignment.	These maps show archaeological character sub-zones within the land required for the construction of the	
Community Forum Area name	areas.	, , , , , , , , , , , , , , , , , , ,	Proposed Scheme.	
CFA o1 – Euston – Station and Approach	✓	✓	✓	
CFA 02 – Camden Town and HS1 Link	✓	✓	✓	
CFA 03 – Primrose Hill to Kilburn (Camden)	✓	✓	✓	
CFA 04 – Kilburn (Brent) to Old Oak Common	✓	✓	✓	
CFA o5 – Northolt Corridor	✓	✓	✓	
CFA o6 – South Ruislip to Ickenham	✓	✓	✓	

Mapping explanatory notes

Copyright statements

Copyright statements are presented in the data dictionary and definitions section at the front of the map book, due to limited space to include this on the individual maps themselves.

Ordnance Survey data

All maps produced as part of the London-West Midlands Environmental Statement (ES) contain Ordnance Survey (OS) data. HS2 Ltd uses the most up-to-date mapping available, where possible, supplied by the OS. As such, we cannot be held responsible for any inaccuracies within this data.

As part of our licence conditions, all digital maps carry a watermark.

Chainage

Most of the maps presented as part of the ES have a chainage value shown next to the alignment. Chainage is presented on the maps in black font, in the form of XX+YYY, for example: 77+000.

Chainage (known as reference chainage) is referenced from Euston station, which is 0+000, and the value presented is in metres. For example, 77+000 refers to the point 77,000m, or 77km, from Euston station. Chainage values increase in intervals dependant on the map scale. For maps at 1:50,000, scale chainage is shown at 1:25,000, scale chainage is shown at 1:25,000, scale chainage is shown at 1km intervals. For maps at 1:10,000, 1:5,000 and 1:2,500 scales, chainage is shown at 1km intervals.

Chainage has been included on the maps as a useful tool for comparing map sets showing the different environmental themes or engineering plans, due to map sets having different scales and therefore showing differing amounts of alignment on the map.

Map orientation

The majority of the maps presented in these map books are presented with the railway alignment running horizontally across the page. The direction of travel to London would be following the alignment to the right hand side of the page, and the West Midlands to the left.

The exceptions to this are map series LV-02, LV-03, LV-04, LV-07 and LV-08, which present the alignment running from the bottom to the top of the page. This is to allow more of the modelled outputs to be shown at the appropriate map scale. In this instance, the direction of travel to London would be to the bottom of the page, and the West Midlands to the top.

Map books

There are a total of 76 map books in the ES, spread across Volumes 2, 4 and 5. A list of the titles is provided in the table below for reference.

Name	Name
olume 2 Map Books Community Forum Area: 01 Euston — Station and Approach	Volume 5 Map Books: Ecology – Community Forum Area: 05 Northolt Corridor
olume 2 Map Book s Community Forum Area: 02 Camden Town and HS1 Link	Volume 5 Map Books: Ecology – Community Forum Area: o6 South Ruislip to Ickenham
olume 2 Map Books Community Forum Area: 03 Primrose Hill to Kilburn (Camden)	Volume 5 Map Books: Ecology – Community Forum Area: 07 Colne Valley
olume 2 Map Books Community Forum Area: 04 Kilburn (Brent) to Old Oak Common	Volume 5 Map Books: Ecology – Community Forum Area: 08 The Chalfonts and Amersham
olume 2 Map Books Community Forum Area: 05 Northolt Corridor	Volume 5 Map Books: Ecology – Community Forum Area: 09 Central Chilterns
olume 2 Map Books Community Forum Area: o6 South Ruislip to Ickenham	Volume 5 Map Books: Ecology – Community Forum Area: 10 Dunsmore, Wendover and Halton
olume 2 Map Books Community Forum Area: 07 Colne Valley	Volume 5 Map Books: Ecology – Community Forum Area: 11 Stoke Mandeville and Aylesbury
olume 2 Map Books Community Forum Area: o8 The Chalfonts and Amersham	Volume 5 Map Books: Ecology – Community Forum Area: 12 Waddesdon and Quainton
olume 2 Map Books Community Forum Area: 09 Central Chilterns	Volume 5 Map Books: Ecology – Community Forum Area: 13 Calvert, Steeple Claydon, Twyford and Chetwode
olume 2 Map Books Community Forum Area: 10 Dunsmore, Wendover and Halton	Volume 5 Map Books: Ecology – Community Forum Area: 14 Newton Purcell to Brackley
olume 2 Map Books Community Forum Area: 11 Stoke Mandeville and Aylesbury	Volume 5 Map Books: Ecology – Community Forum Area: 15 Greatworth to Lower Boddington
olume 2 Map Books Community Forum Area: 12 Waddesdon and Quainton	Volume 5 Map Books: Ecology – Community Forum Area: 16 Ladbroke and Southam
Volume 2 Map Books Community Forum Area: 13 Calvert, Steeple Claydon, Twyford and Chetwode	Volume 5 Map Books: Ecology – Community Forum Area: 17 Offchurch and Cubbington
olume 2 Map Books Community Forum Area: 14 Newton Purcell to Brackley	Volume 5 Map Books: Ecology – Community Forum Area: 18 Stoneleigh, Kenilworth and Burton Green
olume 2 Map Books Community Forum Area: 15 Greatworth to Lower Boddington	Volume 5 Map Books: Ecology – Community Forum Area: 19 Coleshill Junction
olume 2 Map Books Community Forum Area: 16 Ladbroke and Southam	Volume 5 Map Books: Ecology – Community Forum Area: 20 Curdworth to Middleton
olume 2 Map Books Community Forum Area: 17 Offchurch and Cubbington	Volume 5 Map Books: Ecology — Community Forum Area: 21 Drayton Bassett, Hints and Weeford
olume 2 Map Books Community Forum Area: 18 Stoneleigh, Kenilworth and Burton Green	Volume 5 Map Books: Ecology — Community Forum Area: 22 Whittington to Handsacre
olume 2 Map Books Community Forum Area: 19 Coleshill Junction	Volume 5 Map Books: Ecology – Community Forum Area: 23 Balsall Common and Hampton-in-Arden
olume 2 Map Books Community Forum Area: 20 Curdworth to Middleton	Volume 5 Map Books: Ecology – Community Forum Area: 24 Birmingham Interchange and Chelmsley Wood
Volume 2 Map Books Community Forum Area: 21 Drayton Bassett, Hints and Weeford	Volume 5 Map Books: Ecology – Community Forum Area: 25 Castle Bromwich and Bromford
olume 2 Map Books Community Forum Area: 22 Whittington to Handsacre	Volume 5 Map Books: Ecology – Community Forum Area: 26 Washwood Heath to Curzon Street
olume 2 Map Books Community Forum Area: 23 Balsall Common and Hampton-in-Arden	Volume 5 Map Books: Land Quality
olume 2 Map Books Community Forum Area: 24 Birmingham Interchange and Chelmsley Wood	Volume 5 Map Books: Landscape and Visual – Euston and London Metropolitan
olume 2 Map Books Community Forum Area: 25 Castle Bromwich and Bromford	Volume 5 Map Books: Landscape and Visual – Country South
olume 2 Map Books Community Forum Area: 26 Washwood Heath to Curzon Street	Volume 5 Map Books: Landscape and Visual – Country North
olume 4 Map Books Off Route Effects	Volume 5 Map Books: Landscape and Visual – West Midlands Metropolitan
olume 5 Map Books: Agriculture, Forestry and Soils	Volume 5 Map Books: Socio-Economic
olume 5 Map Books: Air Quality	Volume 5 Map Books: Sound, Noise and Vibration – Euston and London Metropolitan
olume 5 Map Books: Community	Volume 5 Map Books: Sound, Noise and Vibration – Country South
olume 5 Map Books: Cultural Heritage – Euston and London Metropolitan	Volume 5 Map Books: Sound, Noise and Vibration – Country North
olume 5 Map Books: Cultural Heritage – Country South	Volume 5 Map Books: Sound, Noise and Vibration – West Midlands Metropolitan
olume 5 Map Books: Cultural Heritage – Country North	Volume 5 Map Books: Traffic and Transport
olume 5 Map Books: Cultural Heritage – West Midlands Metropolitan	Volume 5 Map Books: Water Resources – Euston and London Metropolitan
olume 5 Map Books: Ecology – Community Forum Area: 01 Euston - Station and Approach	Volume 5 Map Books: Water Resources – Country South
olume 5 Map Books: Ecology – Community Forum Area: 02 Camden Town and HS1 Link	Volume 5 Map Books: Water Resources – Country North
Volume 5 Map Books: Ecology – Community Forum Area: 03 Primrose Hill to Kilburn (Camden)	Volume 5 Map Books: Water Resources – West Midlands Metropolitan
Volume 5 Map Books: Ecology – Community Forum Area: 04 Kilburn (Brent) to Old Oak Common	Volume 5 Map Books: Cross Topic Appendix 1: Committed Developments



Data dictionary and definitions

Data dictionary and definitions

Legend features	Definition	Source	Copyright
Airport	Ordnance Survey airports from the OS Strategi dataset.	Ordnance Survey	© Crown Copyright and database rights 2013 Ordnance Survey Licence Number 100049190.
Ancient woodland	Ancient Woodland Inventory. Ancient Woodland is land that has had continuous woodland cover since at least AD1600.	Natural England	© Natural England copyright 2013 Contains Ordnance Survey data © Crown Copyright and database right 2013. All rights reserved. Ordnance Survey Licence Number 100022021. http://www.naturalengland.org.uk/Images/open-government-licence-NE-OS_tcm6-30743.pdf
Archaeological character sub-zones	Areas of archaeological potential defined and characterised by current land use, topography, geology, historic character and distribution of known archaeological finds, sites and assets.	High Speed Two (HS2) Ltd	
Community Forum boundary	The Environmental Statement has been split into 26 sections called Community Forum Areas.	High Speed Two (HS2) Ltd	© Crown Copyright and database rights 2013 Ordnance Survey Licence Number 100049190.
Conservation area	Areas considered worthy of preservation or enhancement because of their special architectural or historic interest. Conservation areas have been captured and digitised from desktop based studies using publically available local authority information. Accuracy of the data is dependent upon that of the individual data source and areas are provided as indicative site boundaries only.	Local Authorities	© Crown Copyright and database rights 2013 Ordnance Survey Licence Number 100049190.
County boundary	County boundaries from Ordnance Survey boundary mapping.	Ordnance Survey	© Crown Copyright and database rights 2013 Ordnance Survey Licence Number 100049190.
Depot, station, headhouse or portal building	Extends to cover operational footprint of each depot and station and the footprint of each tunnel vent shaft and headhouse at surface level. Excludes any ancillary buildings associated with these structures.	High Speed Two (HS2) Ltd	
District/Borough boundary	Ordnance Survey local authority boundary mapping.	Ordnance Survey	© Crown Copyright and database rights 2013 Ordnance Survey Licence Number 100049190.
Existing rail line	Existing railway lines derived from Ordnance Survey Vector map data.	Ordnance Survey	© Crown Copyright and database rights 2013 Ordnance Survey Licence Number 100049190.
Gazetteer ID	Heritage assets identified for the purposes of assessment in the Environmental Statement.	High Speed Two (HS2) Ltd	
Gazetteer ID group boundary	The boundary that defines a grouping of heritage assets identified for the purposes of assessment in the Environmental Statement.	High Speed Two (HS2) Ltd	
Land potentially required during construction	Boundary defining the maximum possible extent of construction works required to build HS2 as far as the current level of design allows. This only covers surface works and includes all tunnel portals, vent shafts and headhouses, but does not apply to wholly tunnelled sections or to air rights. It also encompasses associated highway, access, drainage and utility works.	High Speed Two (HS2) Ltd	
Listed building Grade I	Buildings and structures in England of special architectural or historic interest. In some instances the source data for individual buildings is grouped under a single grid reference; in these instances the data may have been interrogated further to identify addresses of individual buildings with Listed Building status so that these can be displayed individually on the map. The Listed Building data consists of approximately 375,000 standing structures. The information has been converted from paper records georeferenced to digital mapping. A	English Heritage	Contains, or is based upon, English Heritage's National Heritage List for England data © English Heritage.

Legend features	Definition	Source	Copyright
	small percentage of the data was manually located. The data is subject to continuous review and is regularly updated as new structures are designated and positional accuracy improves.		
Listed building Grade II*	Buildings and structures in England of special architectural or historic interest. In some instances the source data for individual buildings is grouped under a single grid reference; in these instances the data may have been interrogated further to identify addresses of individual buildings with Listed Building status so that these can be displayed individually on the map. The Listed Building data consists of approximately 375,000 standing structures. The information has been converted from paper records georeferenced to digital mapping. A small percentage of the data was manually located. The data is subject to continuous review and is regularly updated as new structures are designated and positional accuracy improves.	English Heritage	Contains, or is based upon, English Heritage's National Heritage List for England data © English Heritage.
Listed building Grade II	Buildings and structures in England of special architectural or historic interest. In some instances the source data for individual buildings is grouped under a single grid reference; in these instances the data may have been interrogated further to identify addresses of individual buildings with Listed Building status so that these can be displayed individually on the map. The Listed Building data consists of approximately 375,000 standing structures. The information has been converted from paper records georeferenced to digital mapping. A small percentage of the data was manually located. The data is subject to continuous review and is regularly updated as new structures are designated and positional accuracy improves.	English Heritage	Contains, or is based upon, English Heritage's National Heritage List for England data © English Heritage.
Local Planning Authority (LPA) Areas of Archaeological Importance or Priority	Areas identified by the LPA as being of particular archaeological potential, significance or importance.	Birmingham City Council	Data from Birmingham Historic Environment Record. Copyright Birmingham City Council.
		Buckinghamshire County Council	Based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office © Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Buckinghamshire County Council Licence No. 100021529,2012. Copyright Buckinghamshire County Council.
		Northamptonshire County Council	All Northamptonshire HER data and mapping © Northamptonshire County Council.
		Oxfordshire County Council	Contains Oxfordshire Historic Environment Record data. © Oxfordshire County Council.
		Staffordshire County Council	This map contains Staffordshire Historic Environment Record data. © Staffordshire County Council.
		Hertfordshire County Council	This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Hertfordshire County Council 100019606 2007.

Legend features	Definition	Source	Copyright
		Warwickshire County Council	Data provided by the Warwickshire and Solihull Historic Environment Records, Copyright 2013 Warwickshire County Council
		English Heritage	© English Heritage 2013. Contains Ordnance Survey data © Crown copyright and database right 2013.
Non-designated heritage asset		Birmingham City Council	Data from Birmingham Historic Environment Record. Copyright Birmingham City Council.
	Assets that are not designated as, for example, Scheduled Monument, Listed Building, Registered Park and Garden, Registered Battlefield or	Buckinghamshire County Council	Based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office © Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Buckinghamshire County Council Licence No. 100021529, 2012. Copyright Buckinghamshire County Council.
		Northamptonshire County Council	All Northamptonshire HER data and mapping © Northamptonshire County Council.
	Conservation area.	Oxfordshire County Council	Contains Oxfordshire Historic Environment Record data. © Oxfordshire County Council.
		Staffordshire County Council	This map contains Staffordshire Historic Environment Record data. © Staffordshire County Council.
		Hertfordshire County Council	This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Hertfordshire County Council 100019606 2007.
		Warwickshire County Council	Data provided by the Warwickshire and Solihull Historic Environment Records, Copyright 2013 Warwickshire County Council.
Railway Station	Existing railway stations derived from Ordnance Survey Vector map data.	Ordnance Survey	© Crown Copyright and database rights 2013 Ordnance Survey Licence Number 100049190.
Registered park or garden	Parks and Gardens of special historic interest. Supplied by English Heritage. Of the 1,590 Registered Parks and Gardens, over 91% were captured against the 1:10,000 Ordnance Survey Raster product. 135 records are potentially subject to movement under Positional Accuracy Improvement (PAI) improvements.	English Heritage	Contains, or is based upon, English Heritage's National Heritage List for England data © English Heritage.
Route in tunnel	Represents the proposed route of HS2, split into route on surface and	High Speed Two (HS2) Ltd	
Route on surface Scheduled Monument	tunnelled sections. A schedule has been kept since 1882 of monuments considered to be of national importance by the government. The current legislation, the Ancient Monuments and Archaeological Areas Act 1979, supports a formal system of Scheduled Monument Consent for any work to a designated monument. The Scheduled Monument layer consists of approximately 22,380 monuments tied into the Ordnance Survey. The majority of these are fixed; however, a small number of records may be	English Heritage	Contains, or is based upon, English Heritage's National Heritage List for England data © English Heritage.

Legend features	Definition	Source	Copyright
	updated as digital positional accuracy improves. The data is subject to continuous review and regularly updated as new monuments are designated.		
Study area	250m for urban and 500m for rural.	High Speed Two (HS2) Ltd	
Study area; zone of theoretical visibility (ZTV)	Study area: Area within which all non-designated and designated assets that may be affected by the proposals have been identified and assessed.	High Speed Two (HS2) Ltd	
Water body	Based on Ordnance Survey Vector Map District.	Ordnance Survey	© Crown Copyright and database rights 2013 Ordnance Survey Licence Number 100049190.
Watercourse	The Detailed River Network (DRN) is the only large-scale, accurate and fully attributed digital river centreline covering England and Wales.	Environment Agency	Contains Environment Agency information © Environment Agency and database right.
Woodland	Woodland areas derived from Ordnance Survey mastermap data.	Ordnance Survey	© Crown Copyright and database rights 2013 Ordnance Survey Licence Number 100049190.

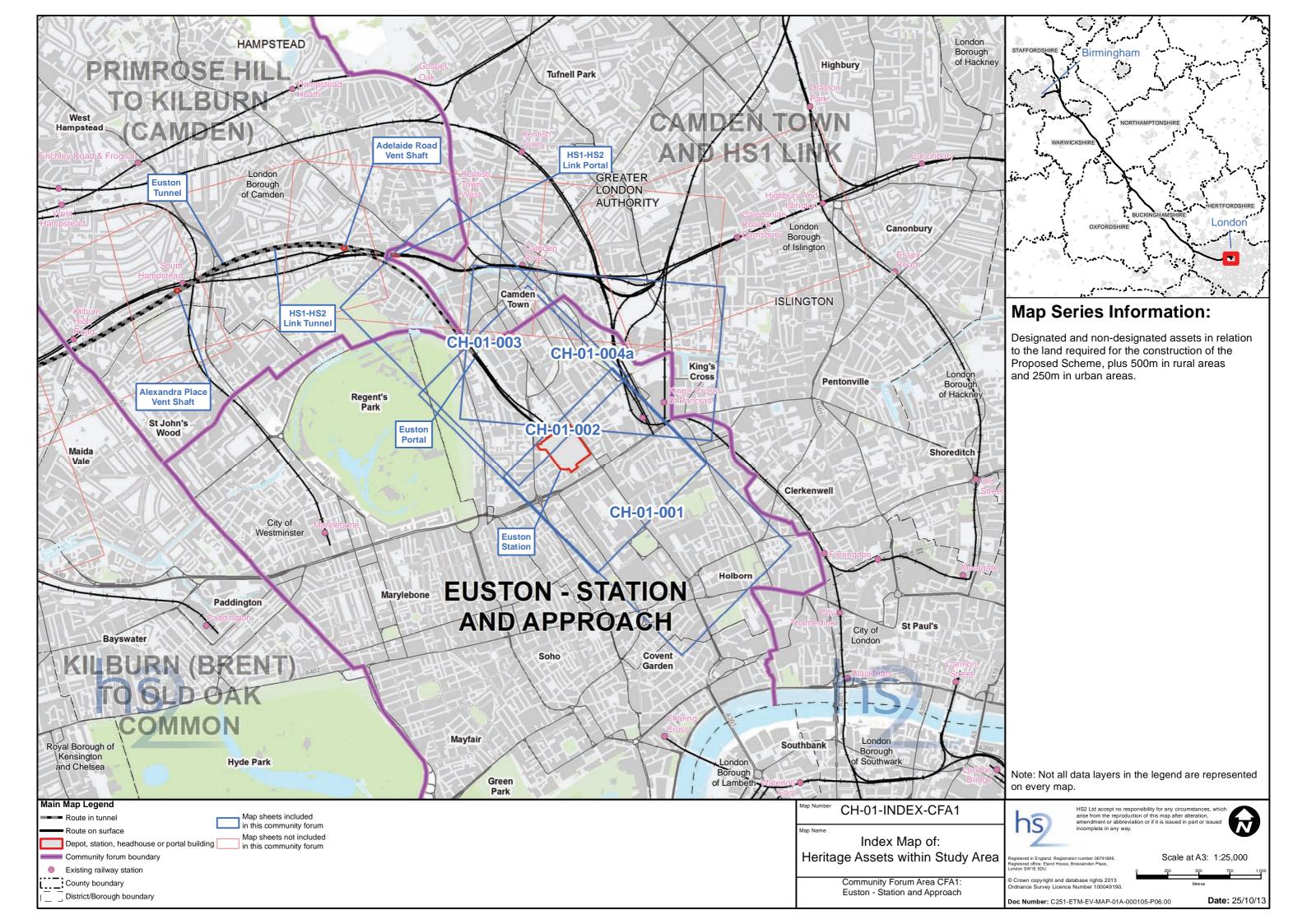


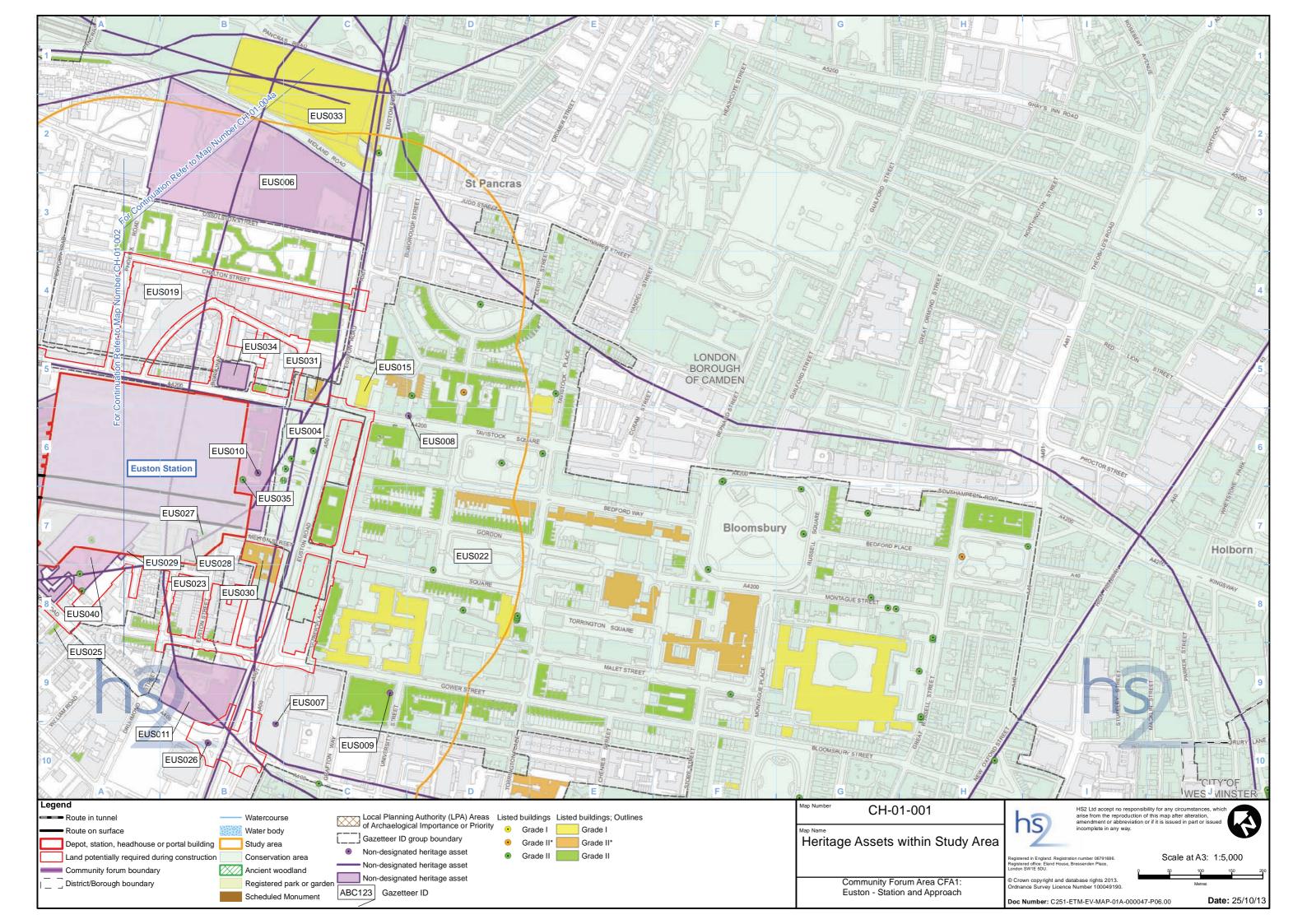
CFA1 Euston - Station and Approach

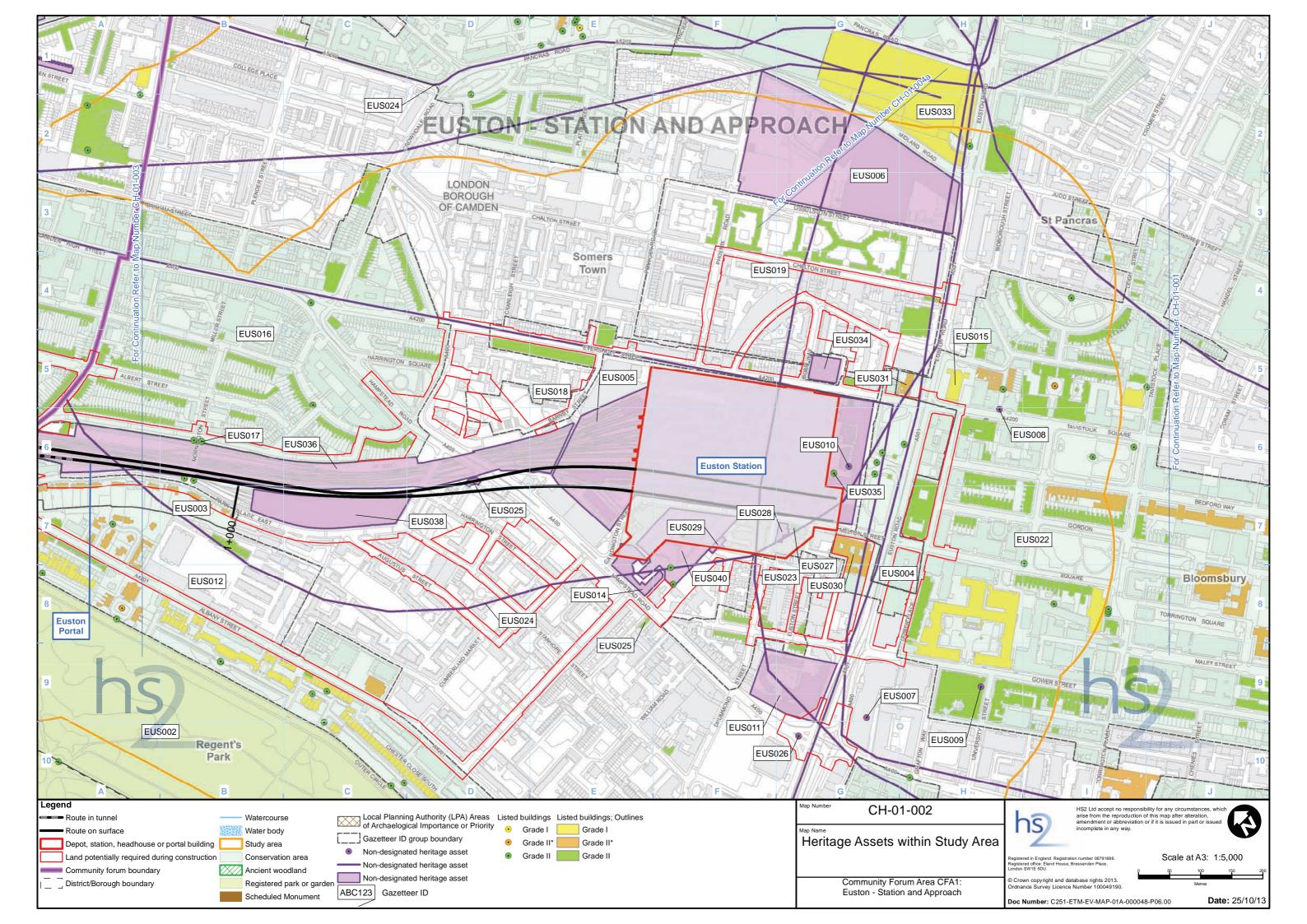
CH-o1 - Heritage Assets within Study Area

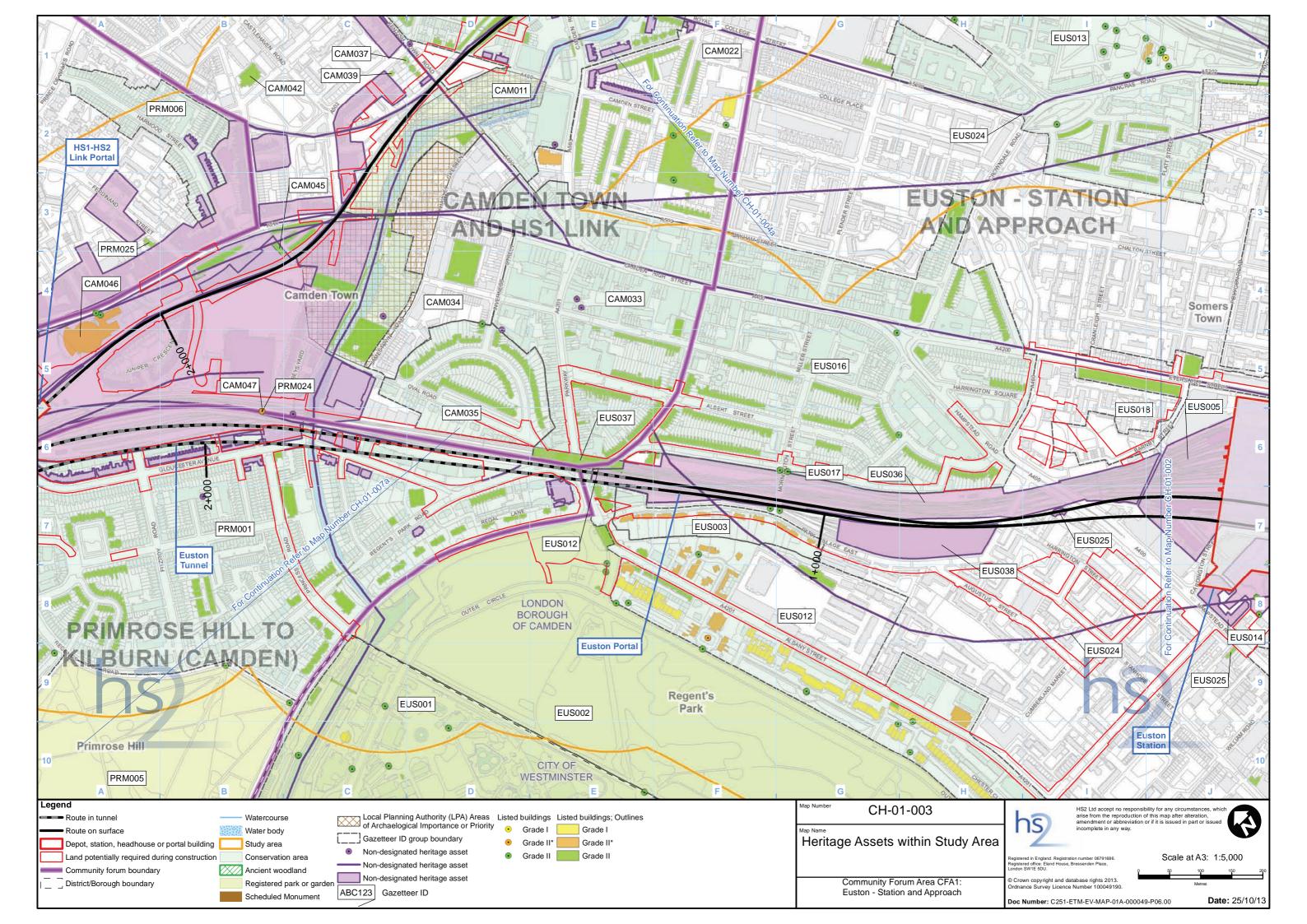
CH-o2 - Designated Heritage Assets

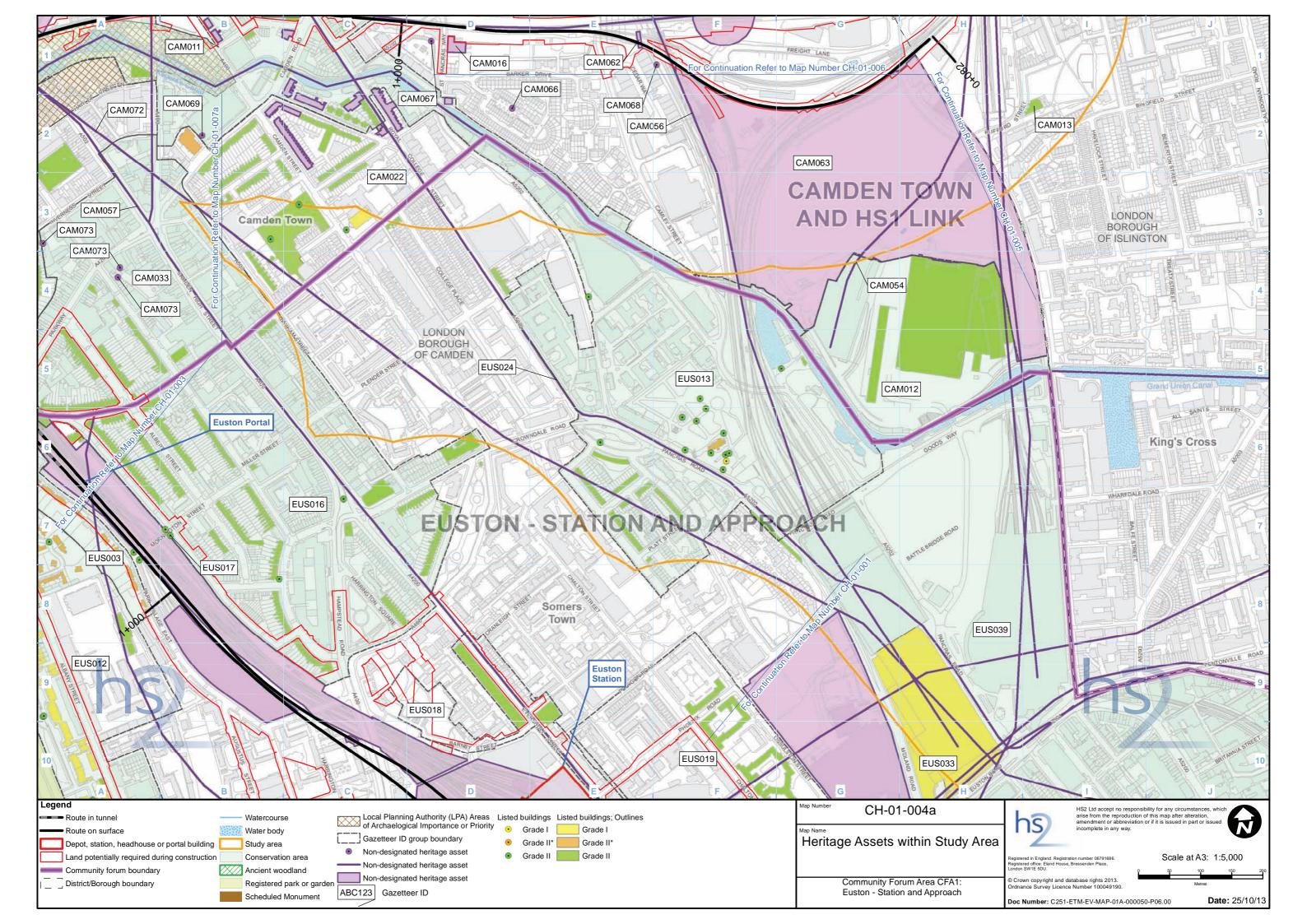
CH-o3 - Archaeological Character Sub-zones

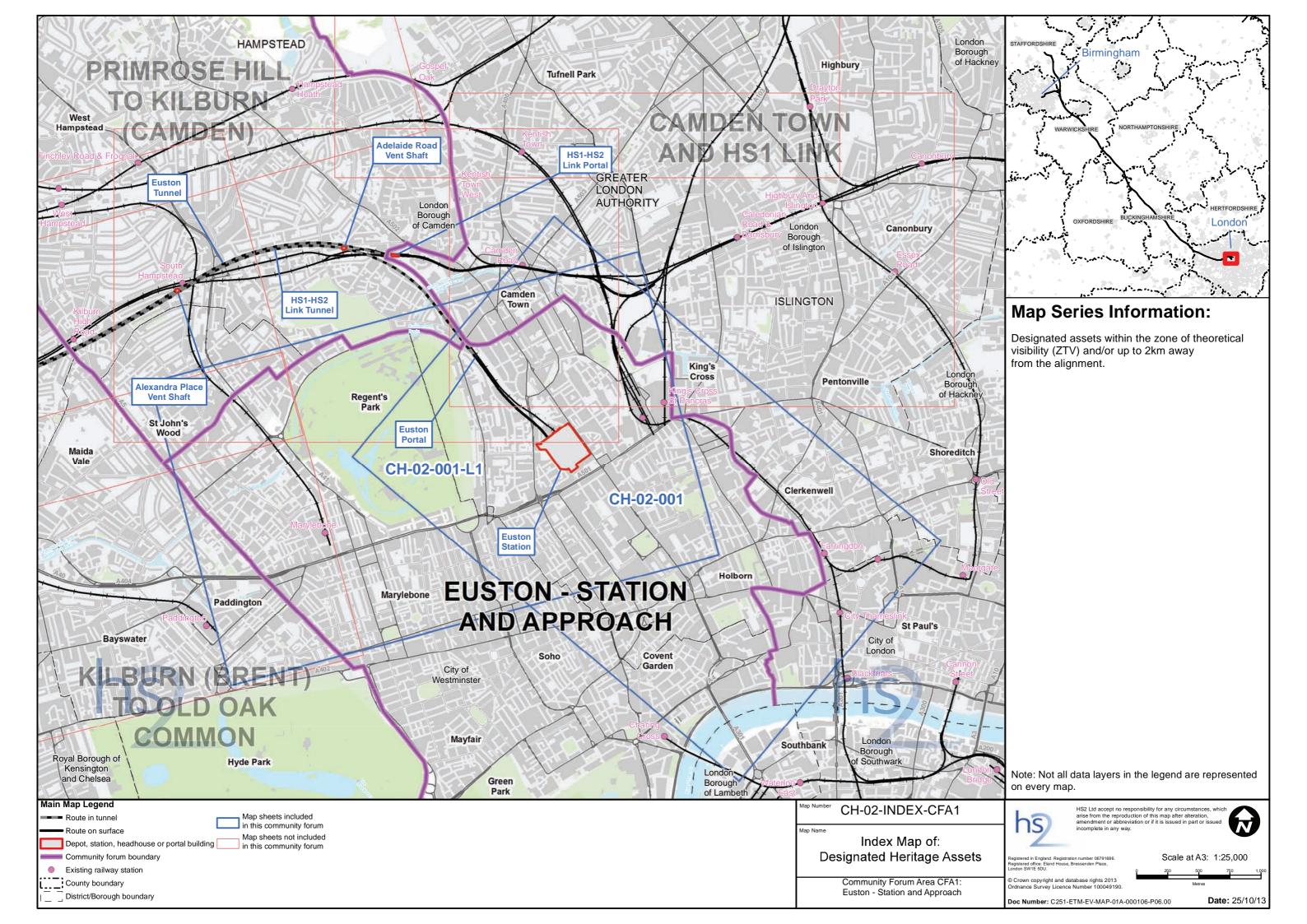


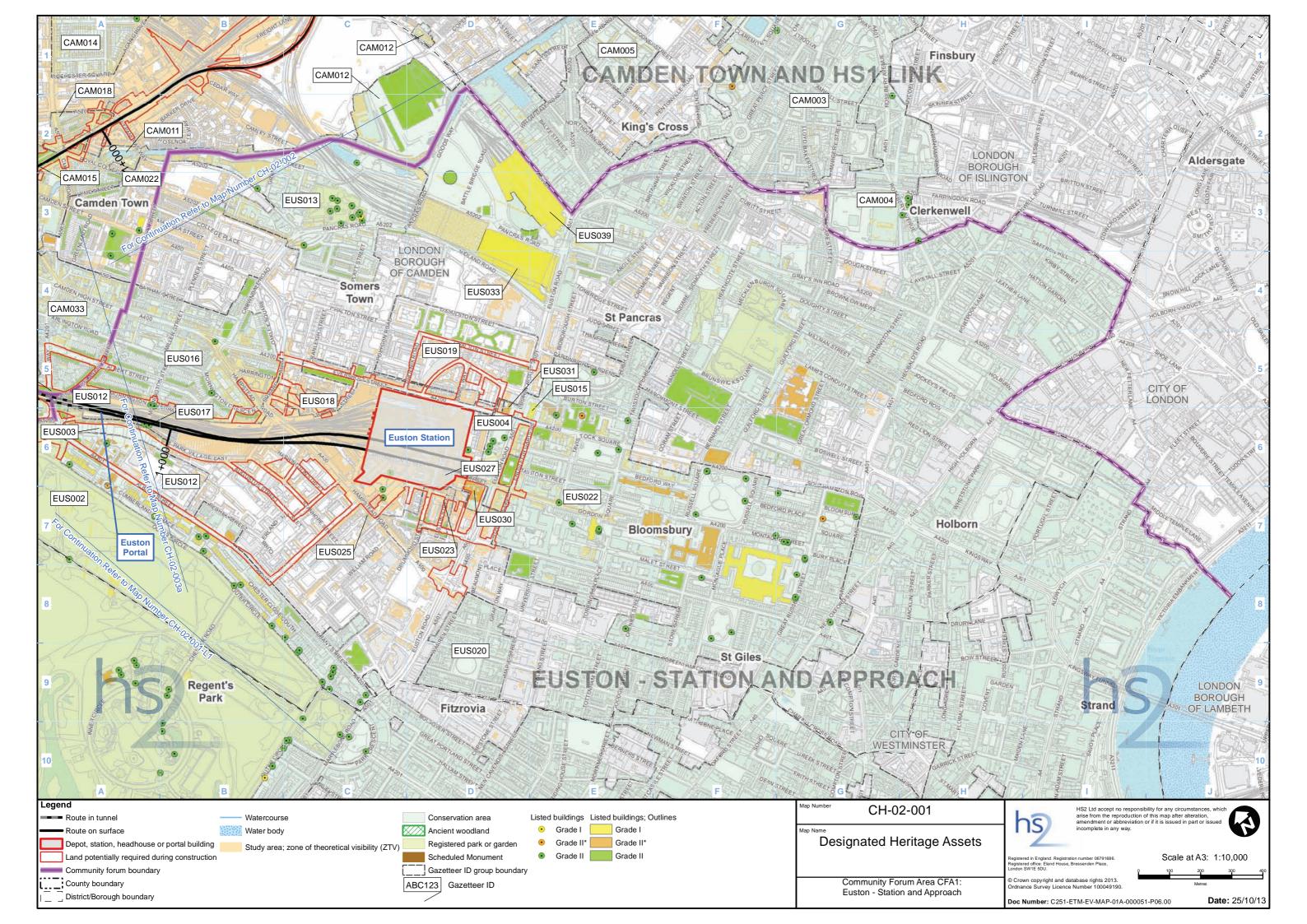


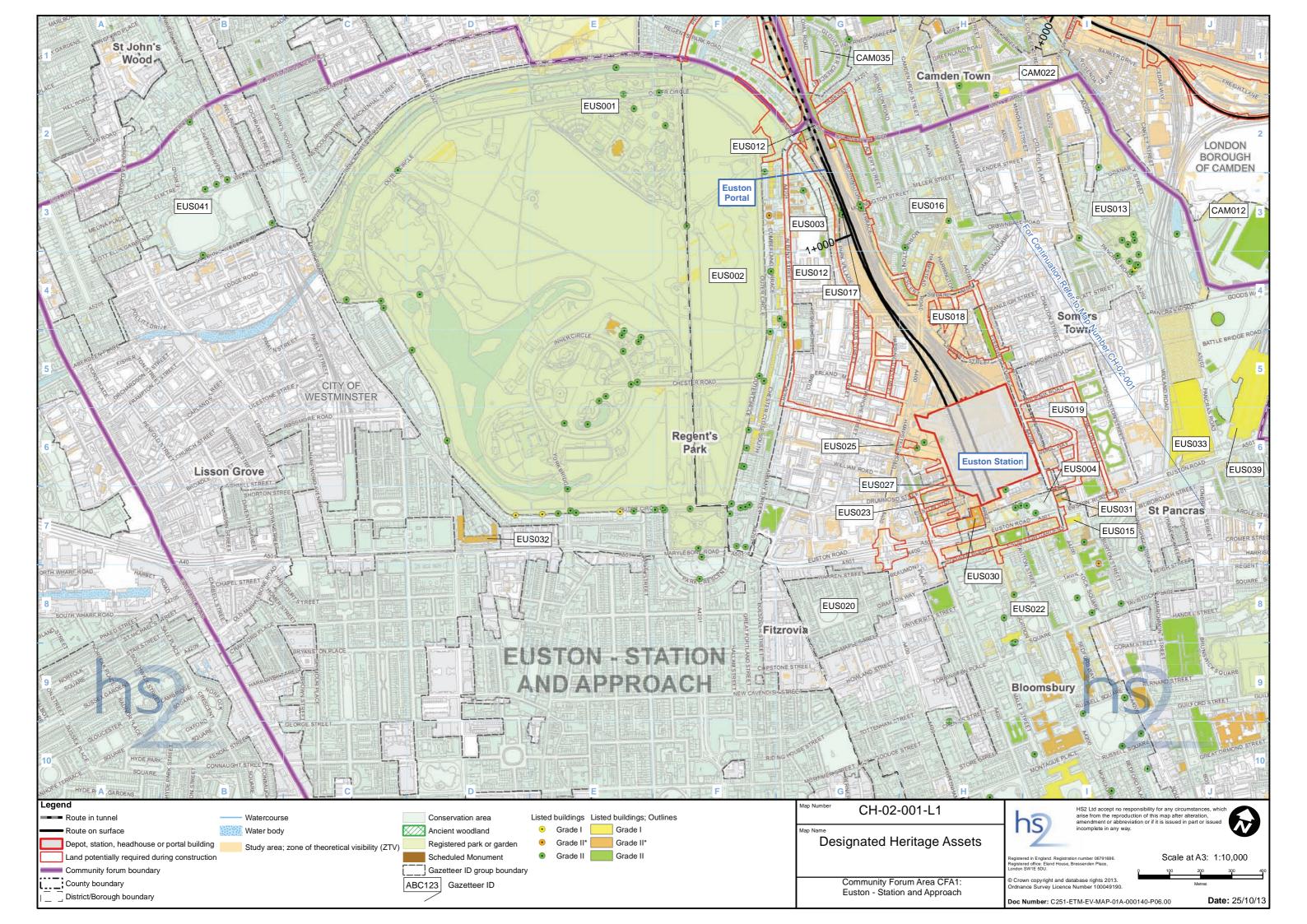


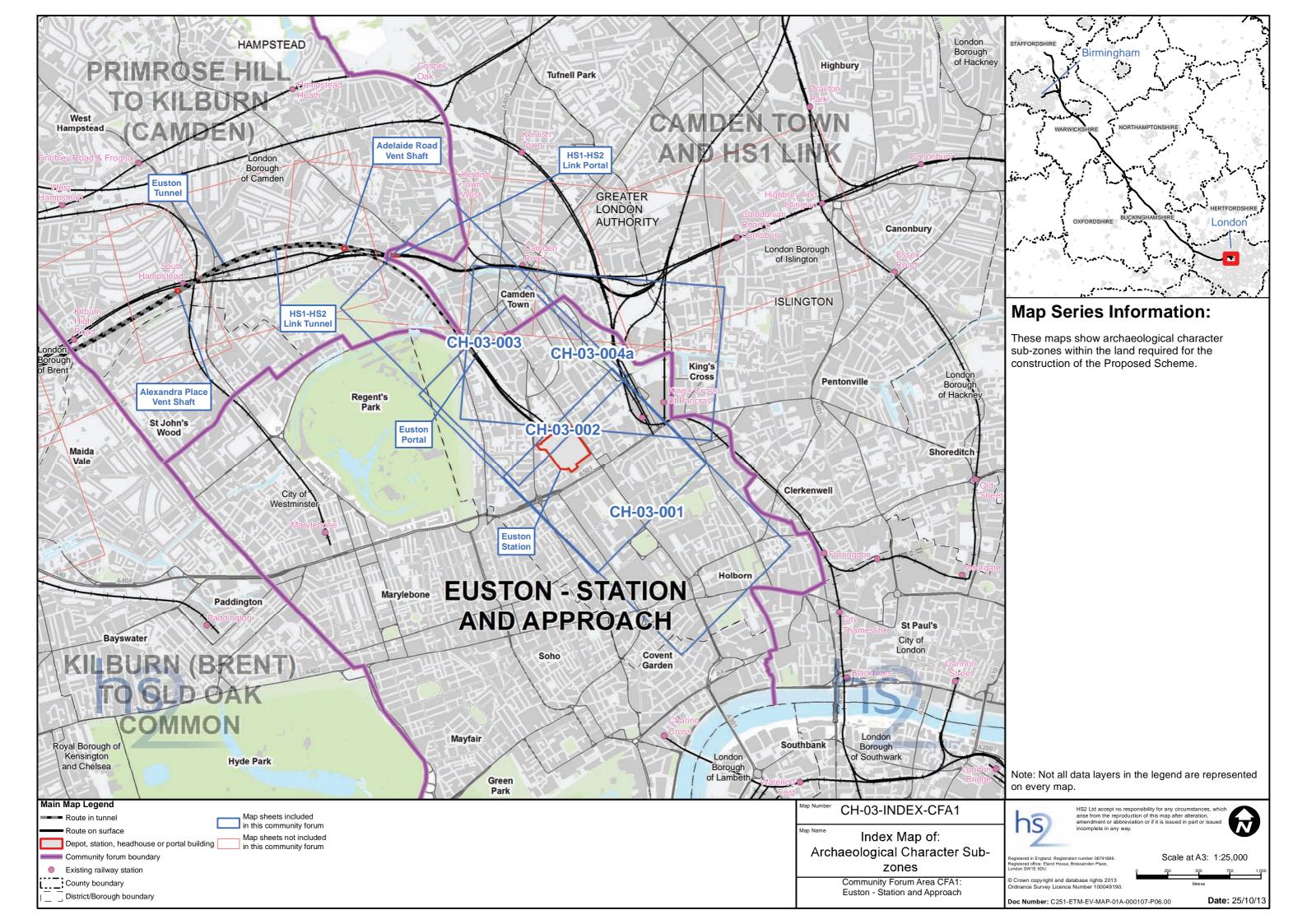


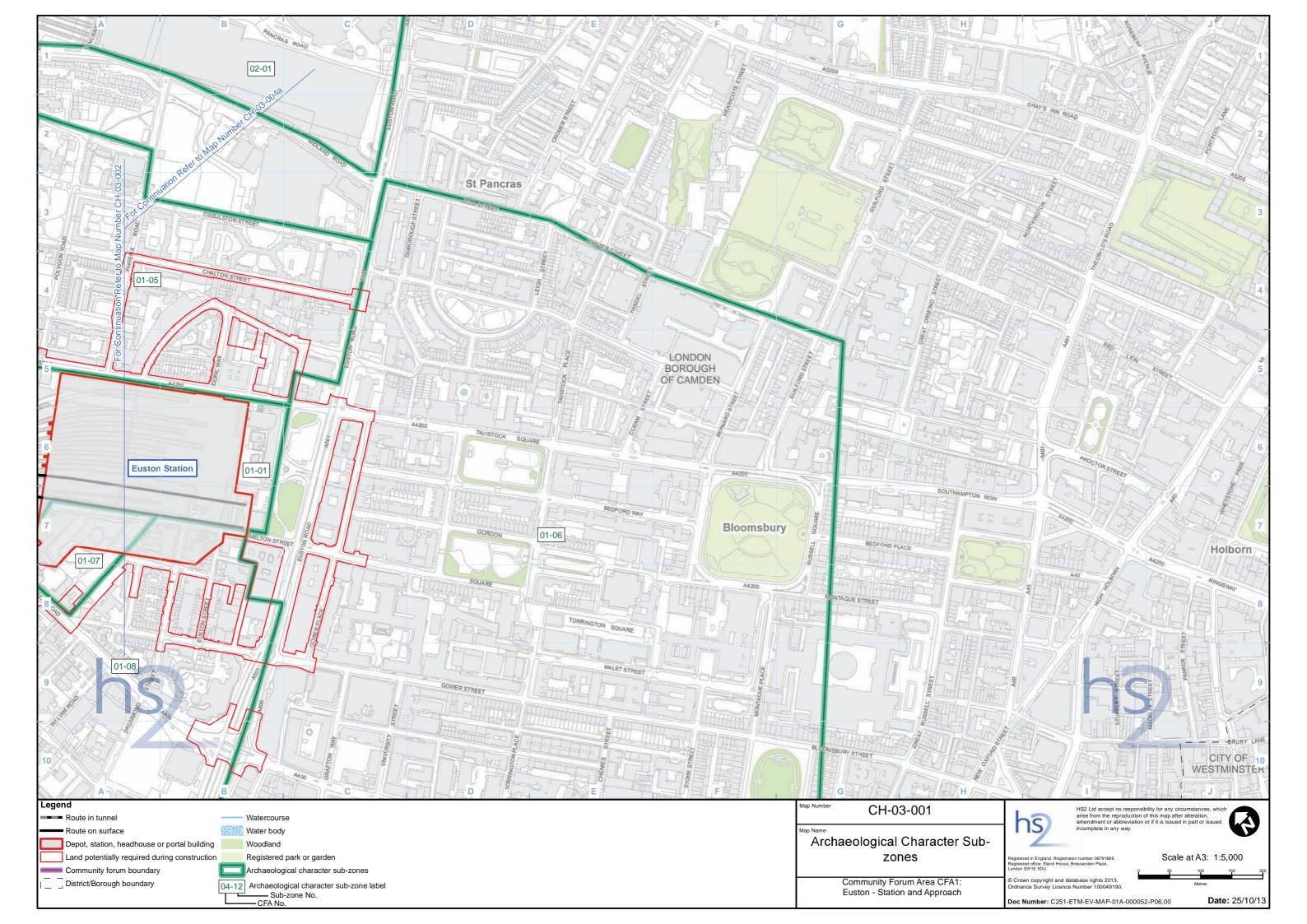


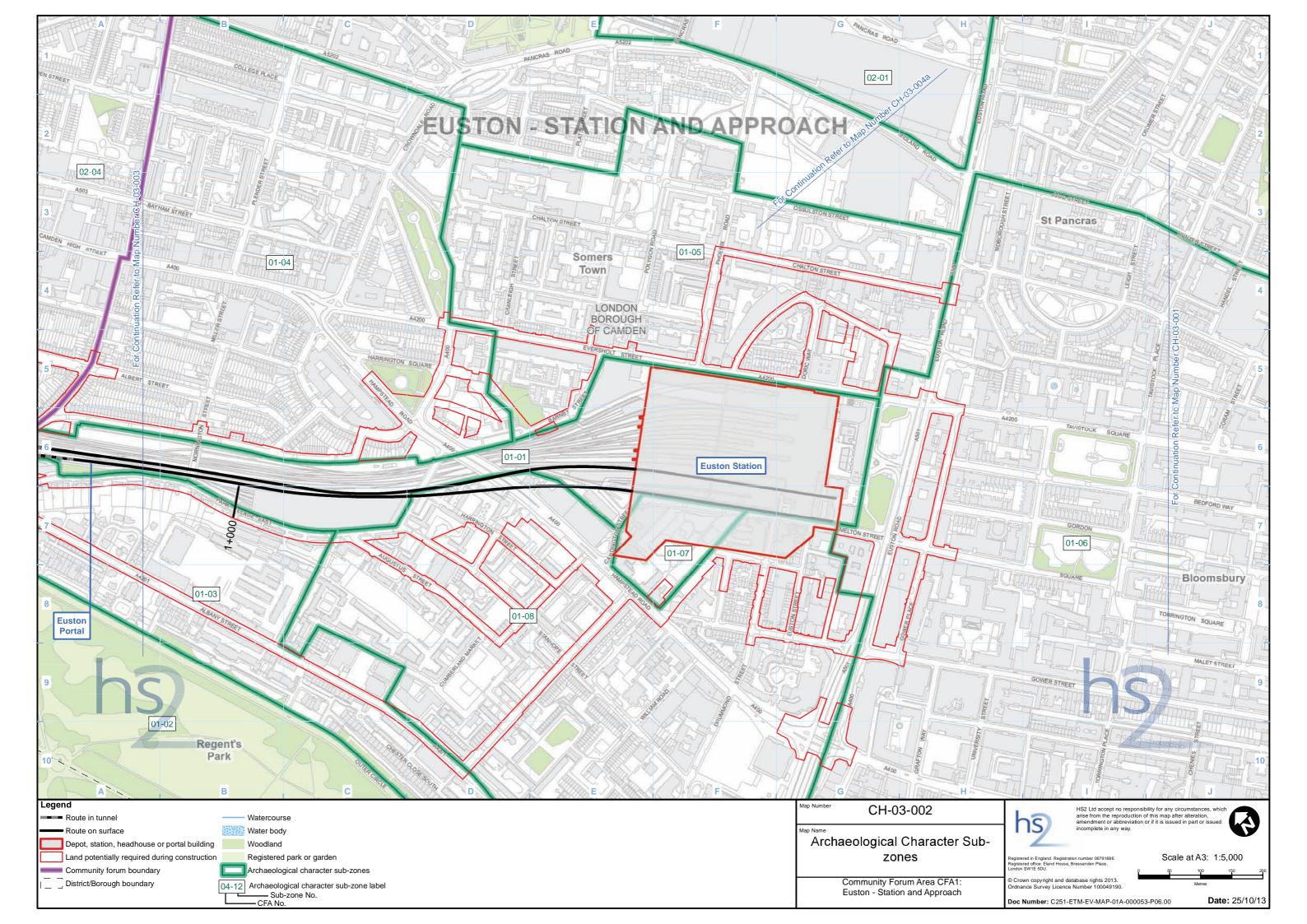


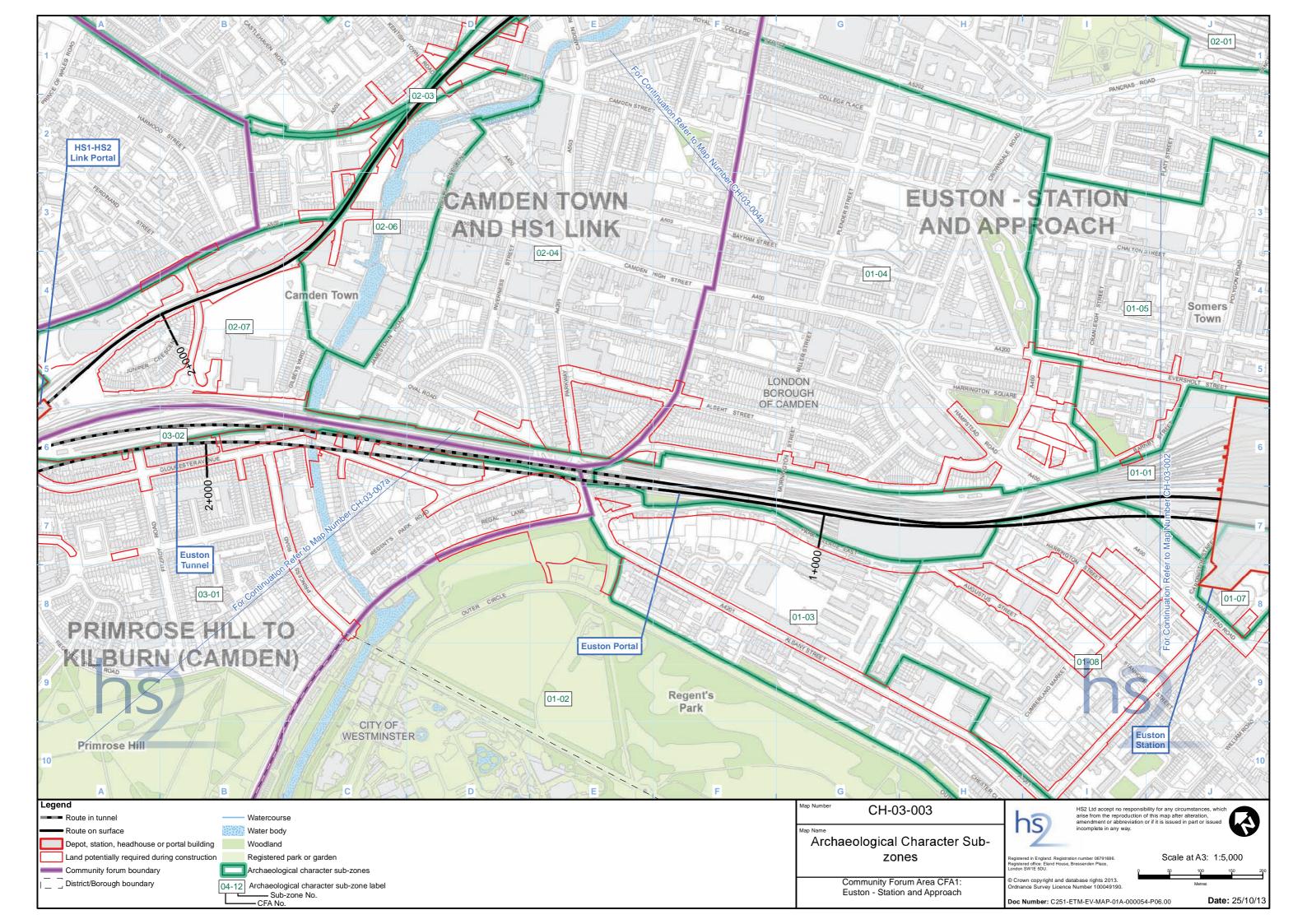


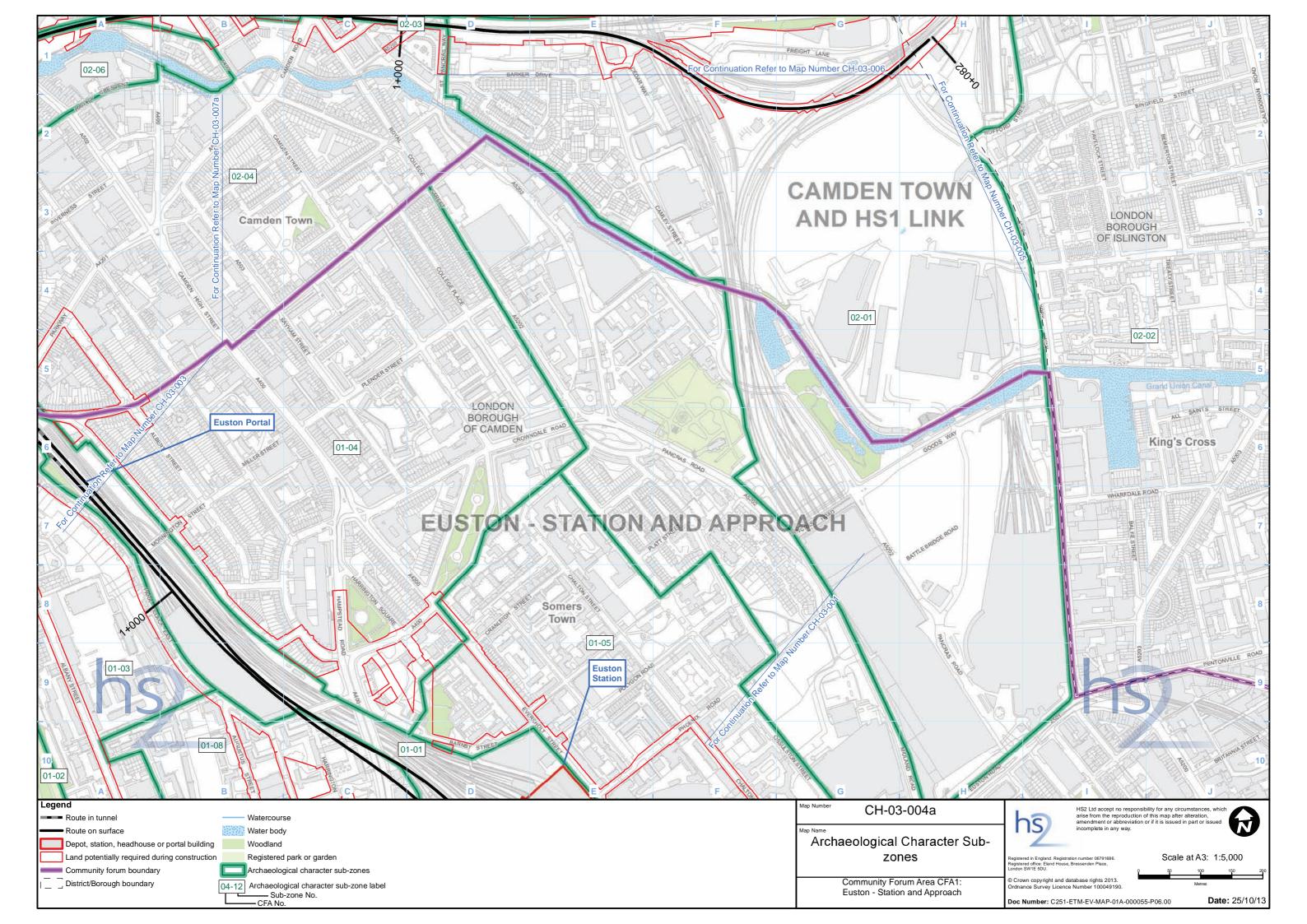












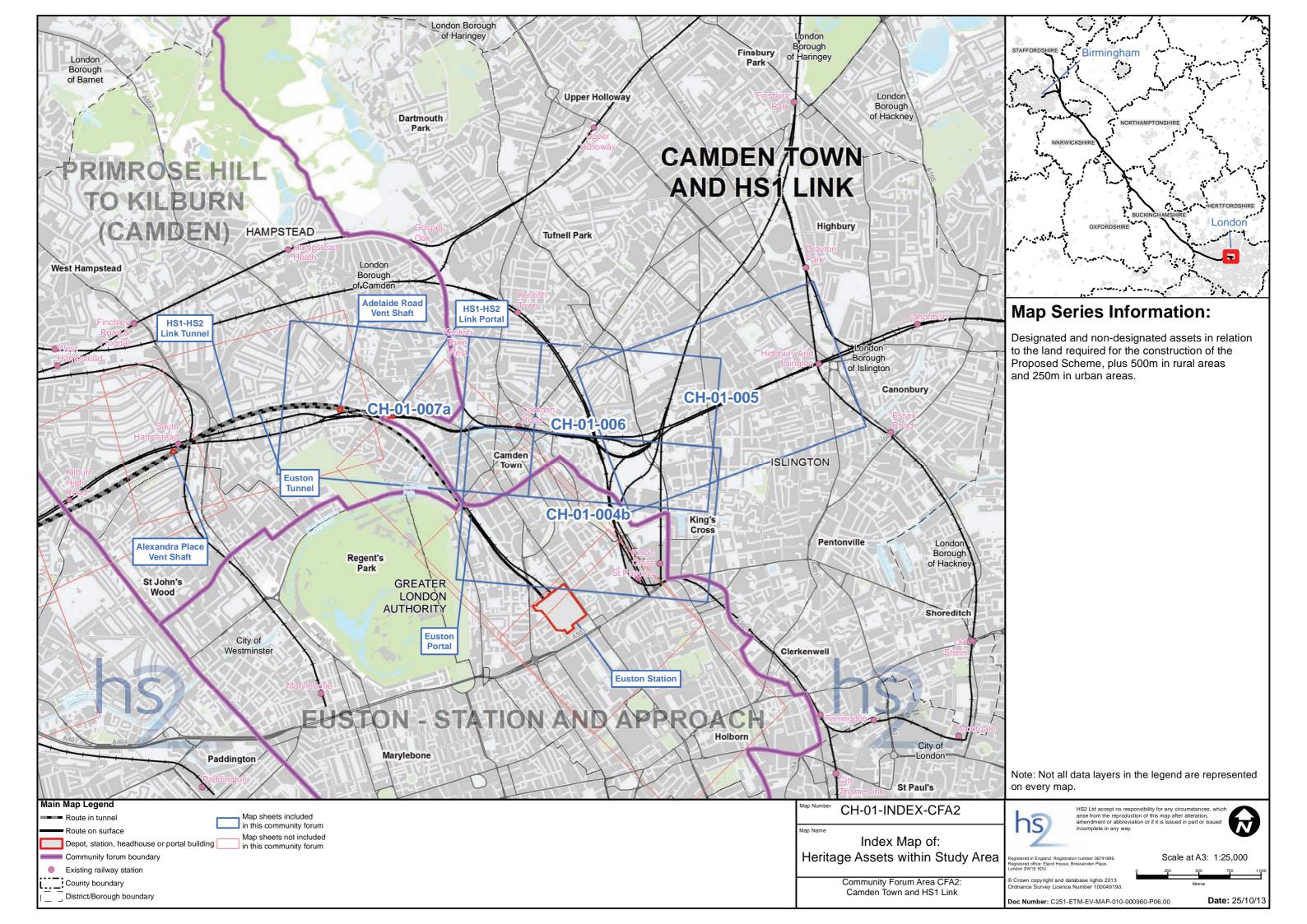


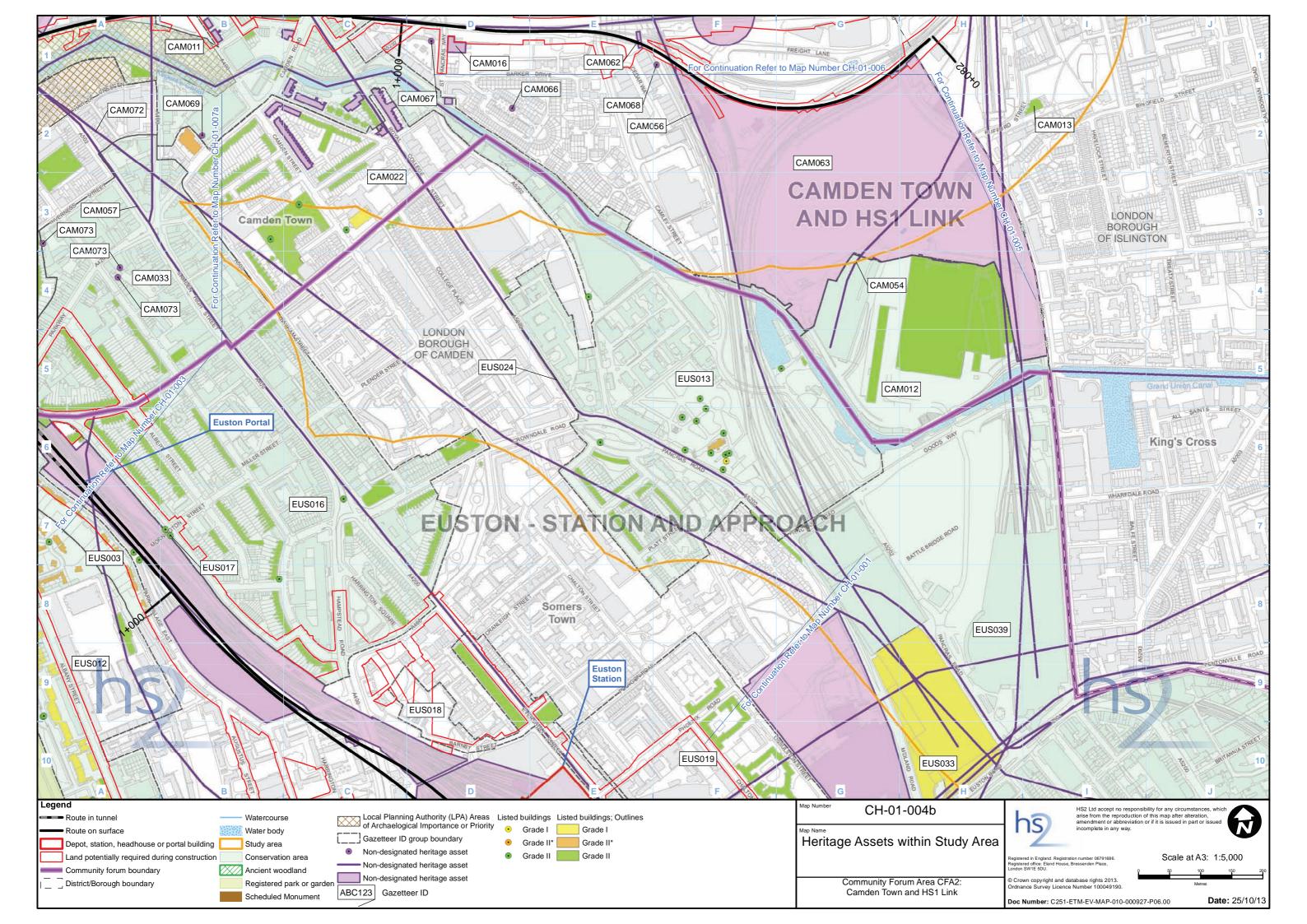
CFA2 | Camden Town and HS1 Link

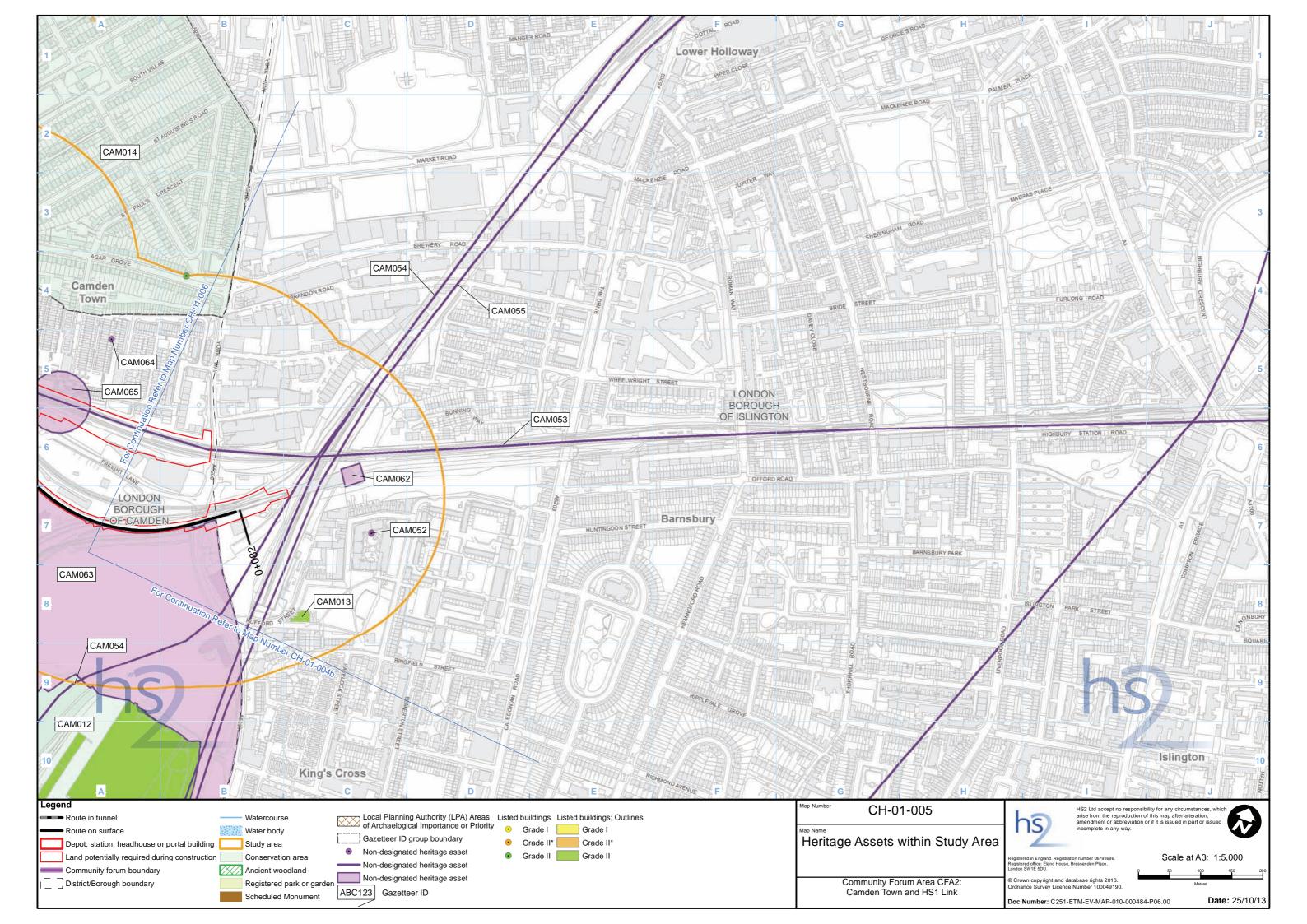
CH-o1 - Heritage Assets within Study Area

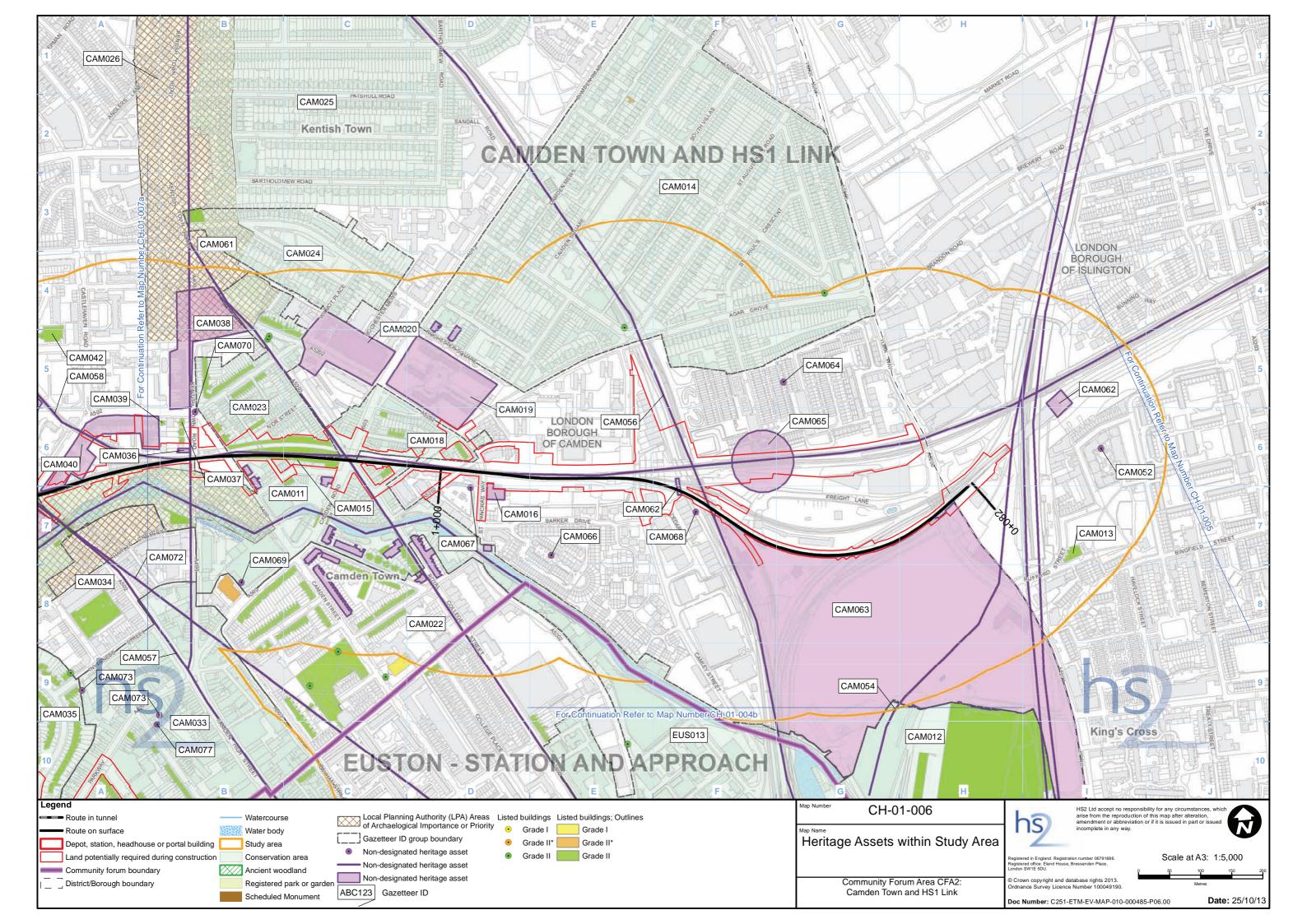
CH-o2 - Designated Heritage Assets

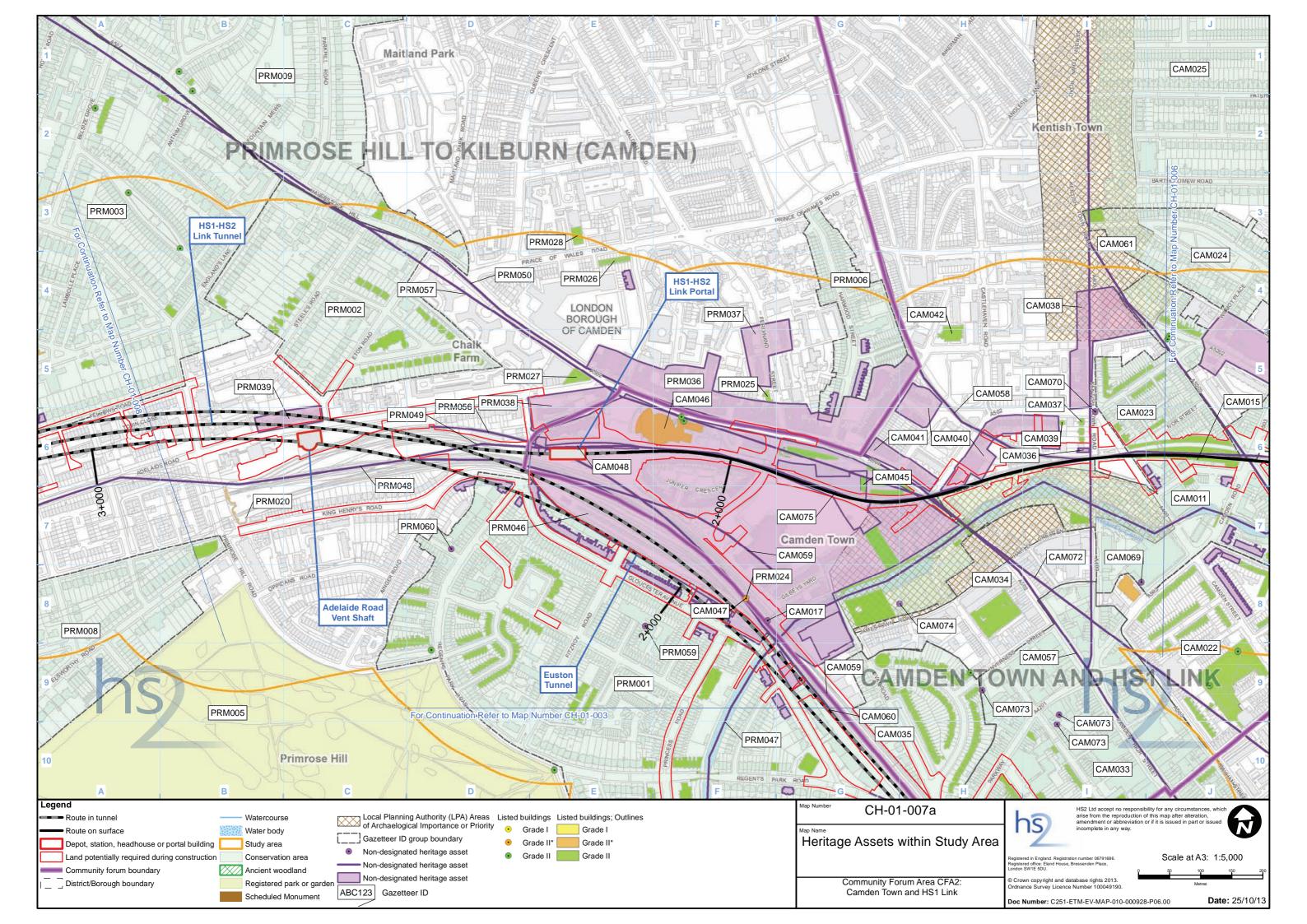
CH-o3 - Archaeological Character Sub-zones

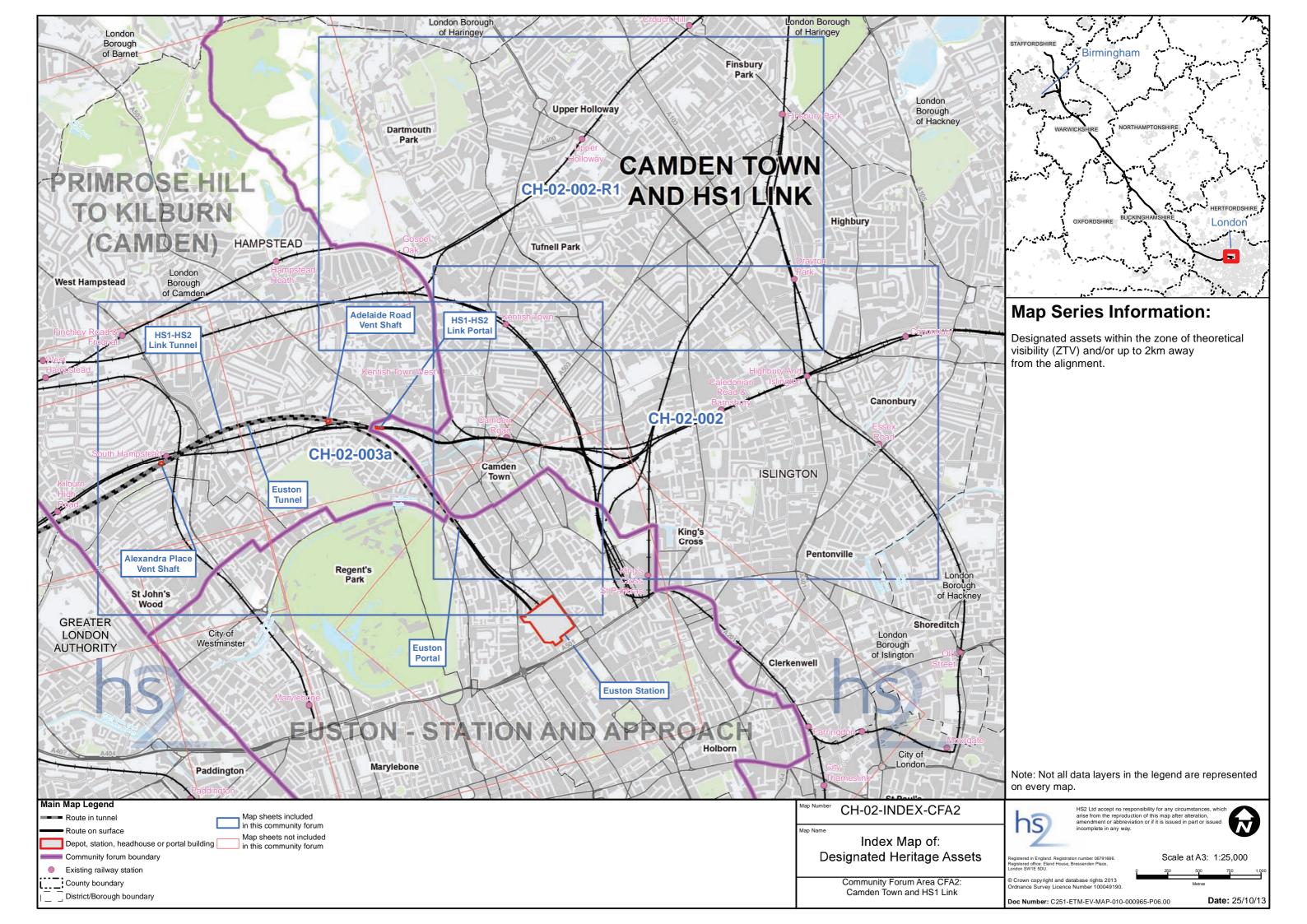


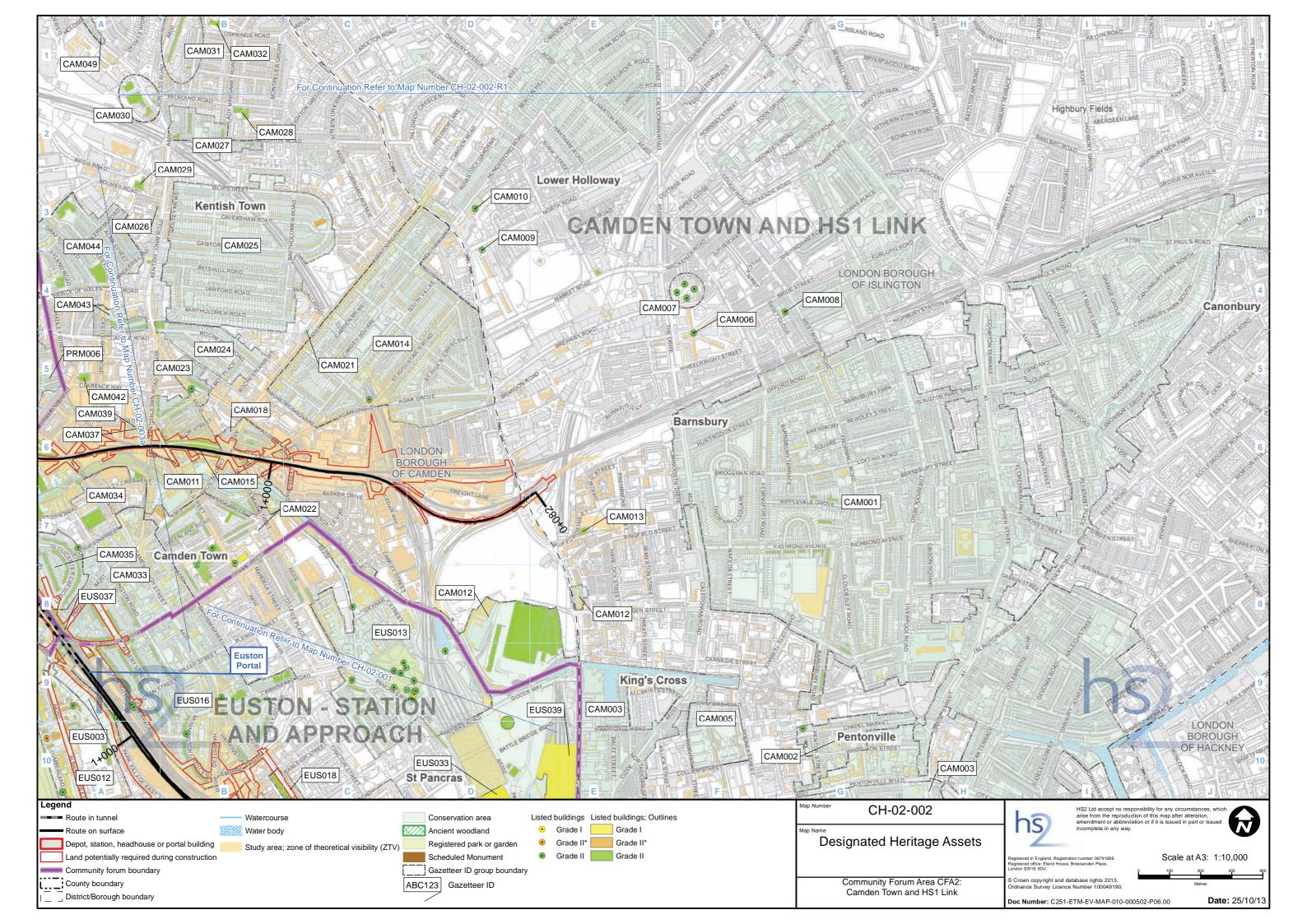


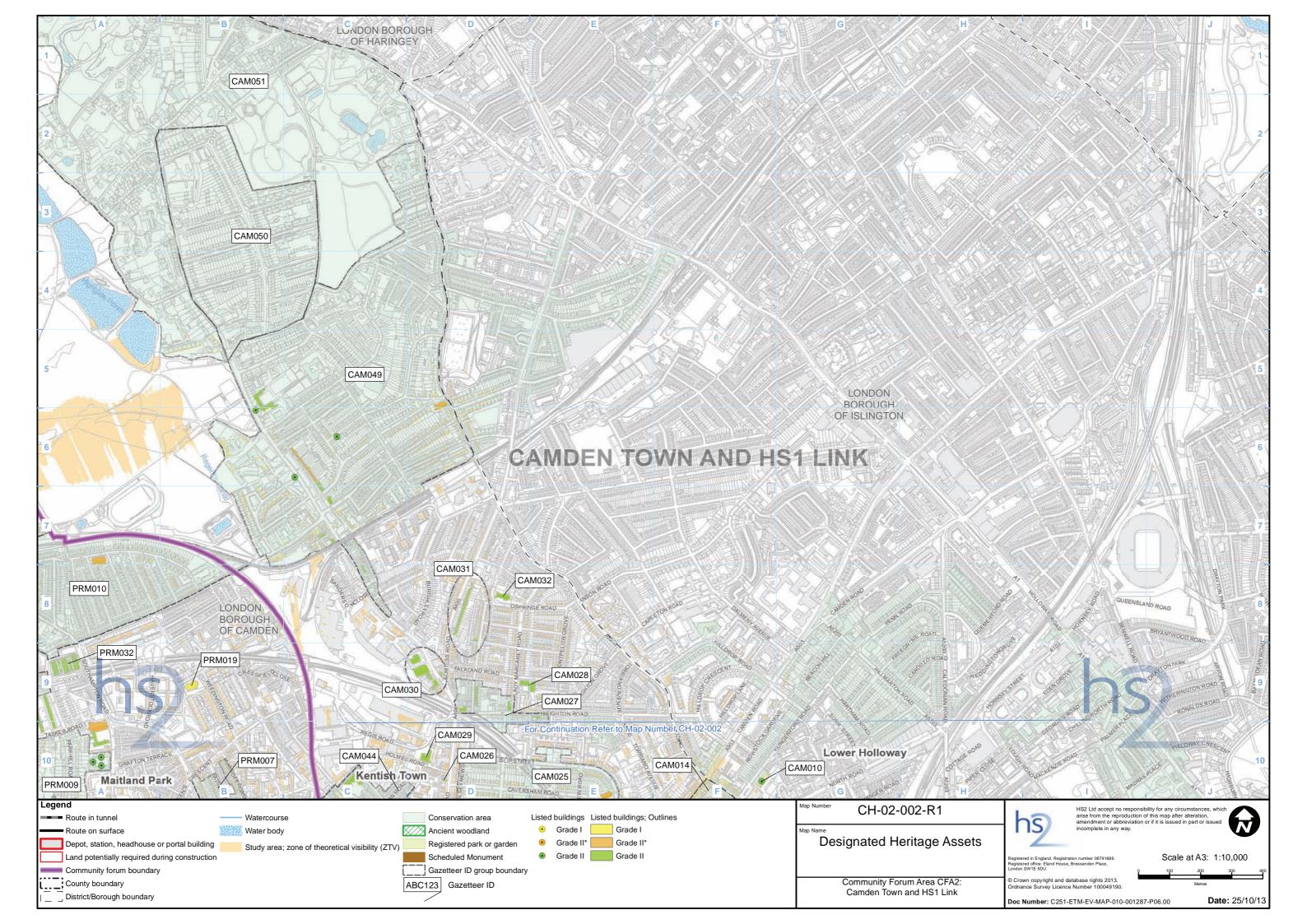


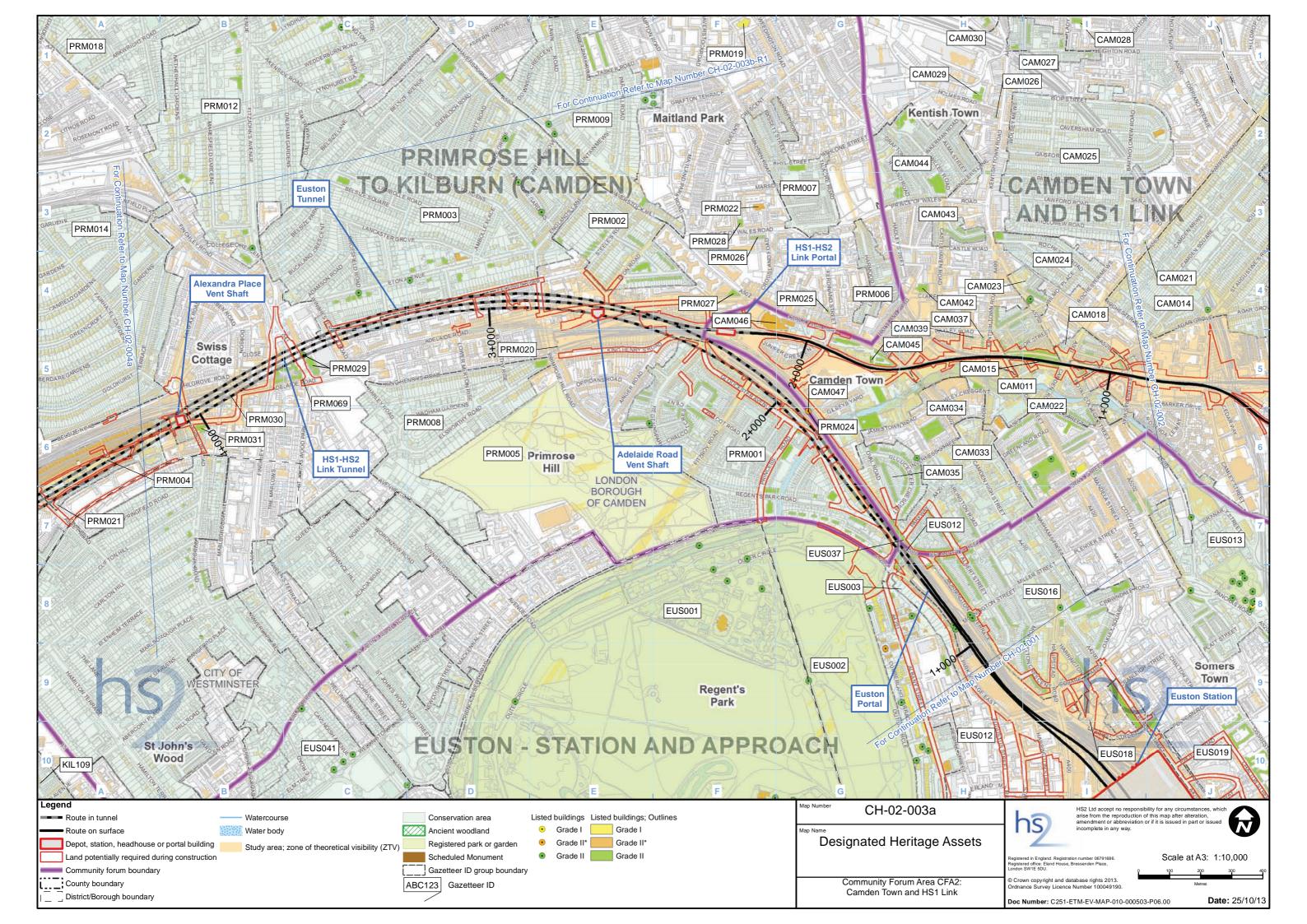


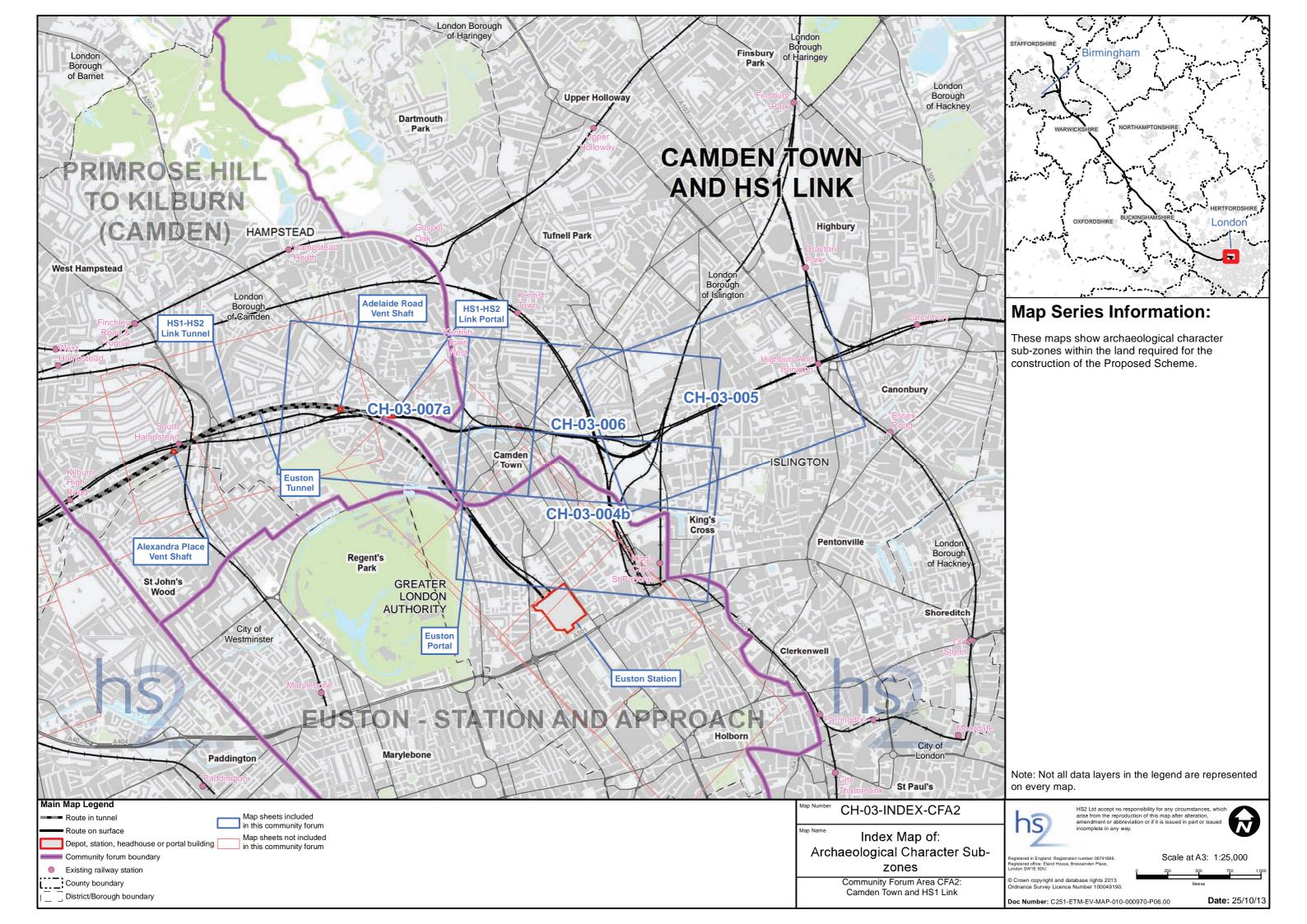


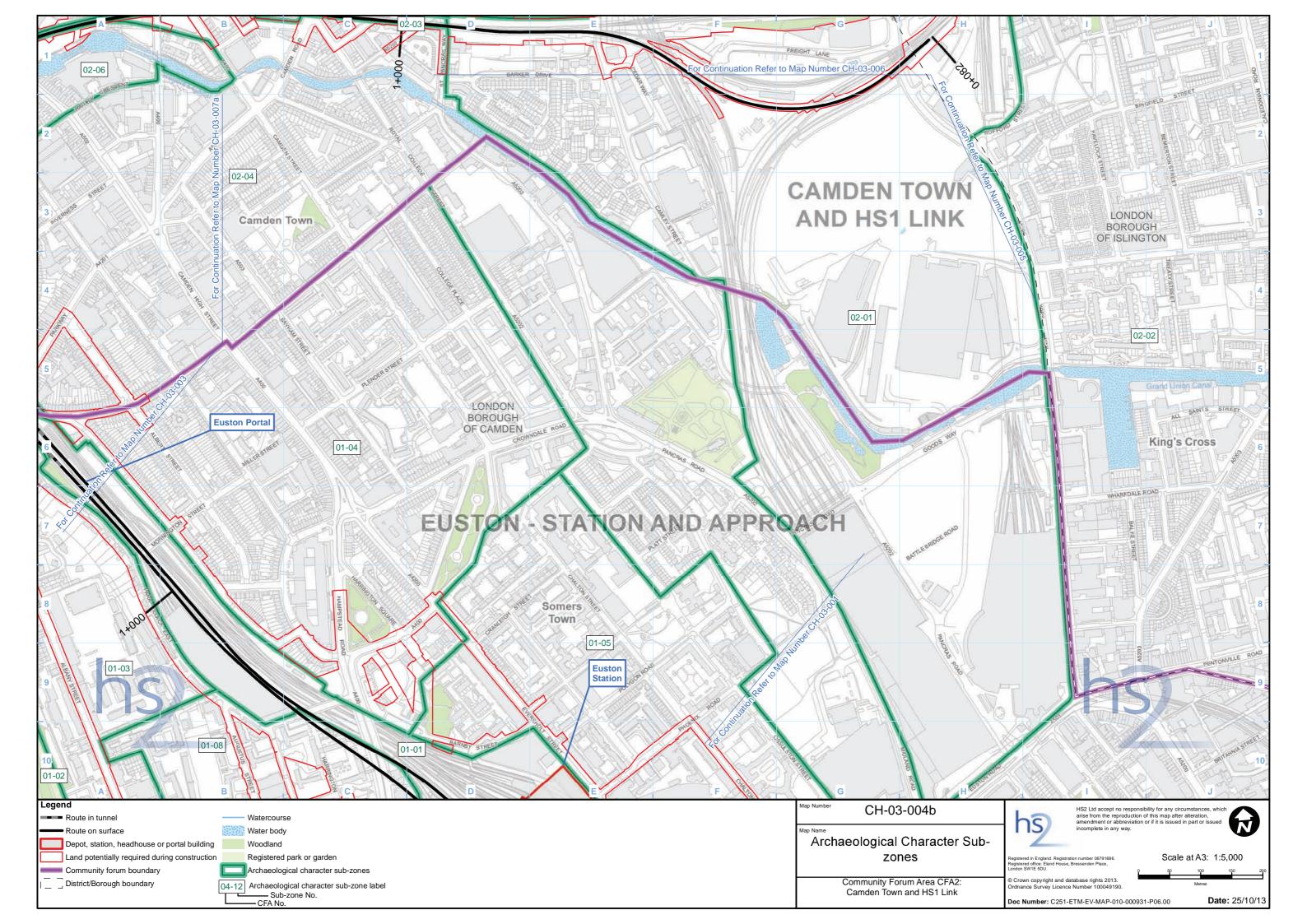


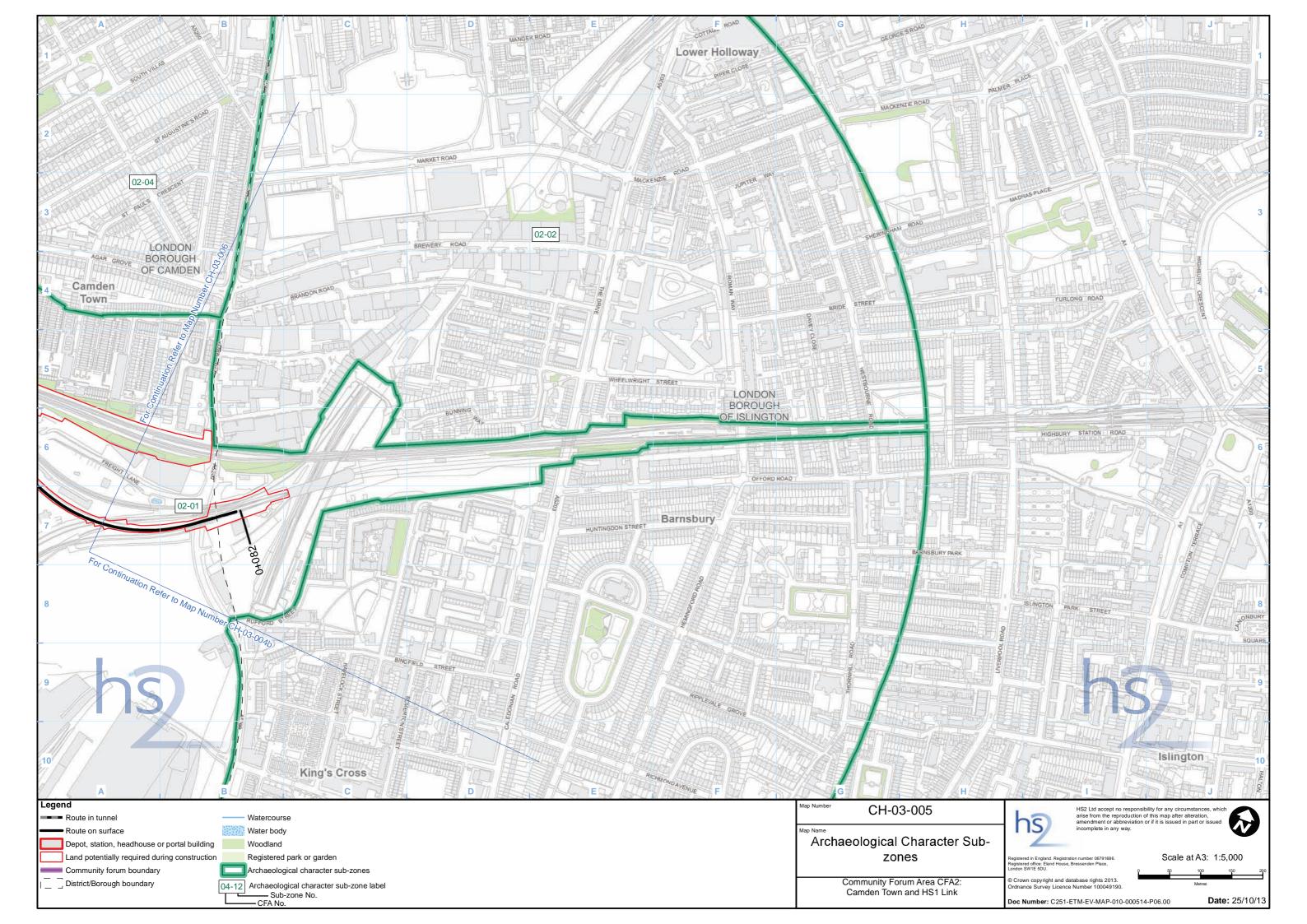


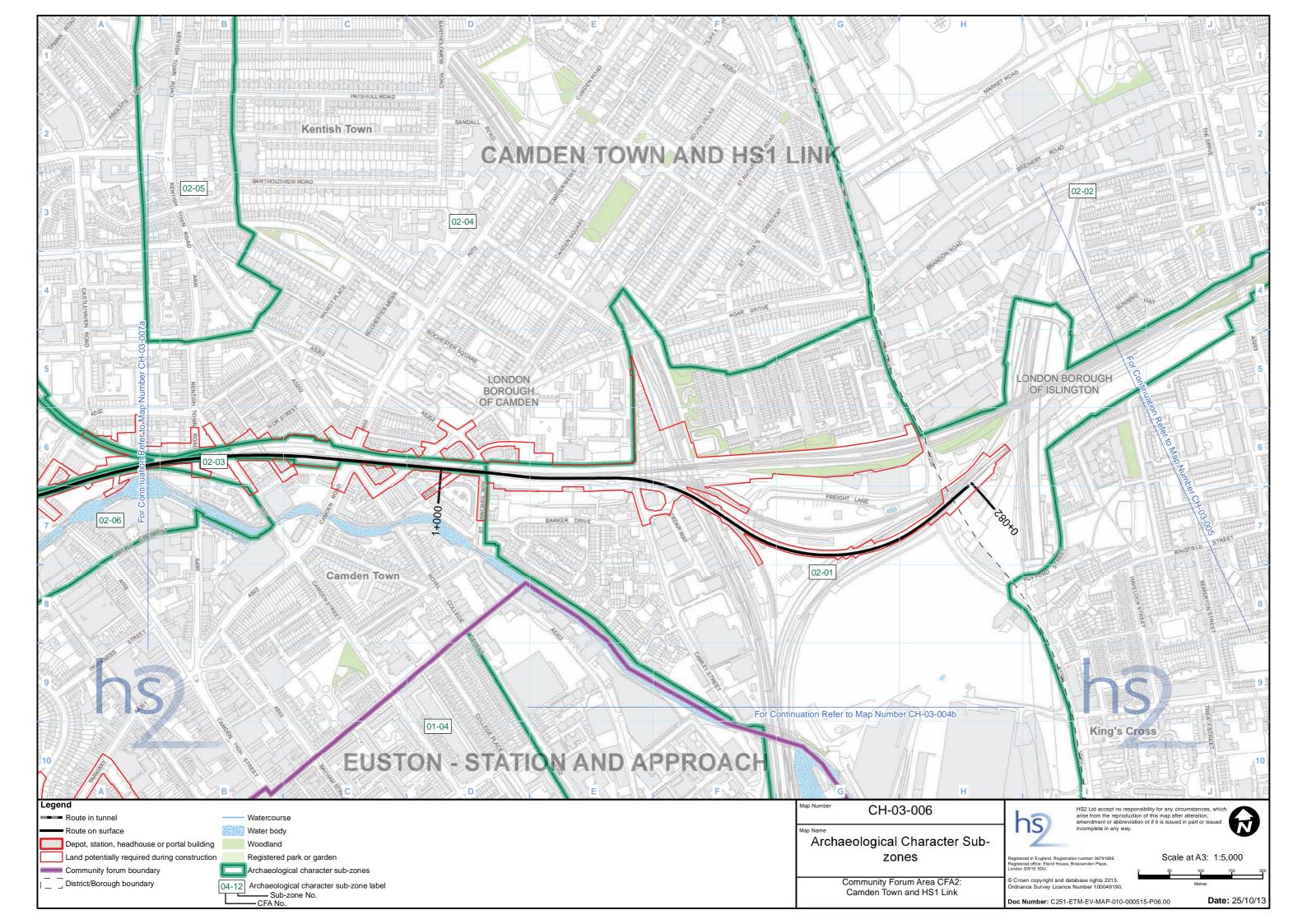


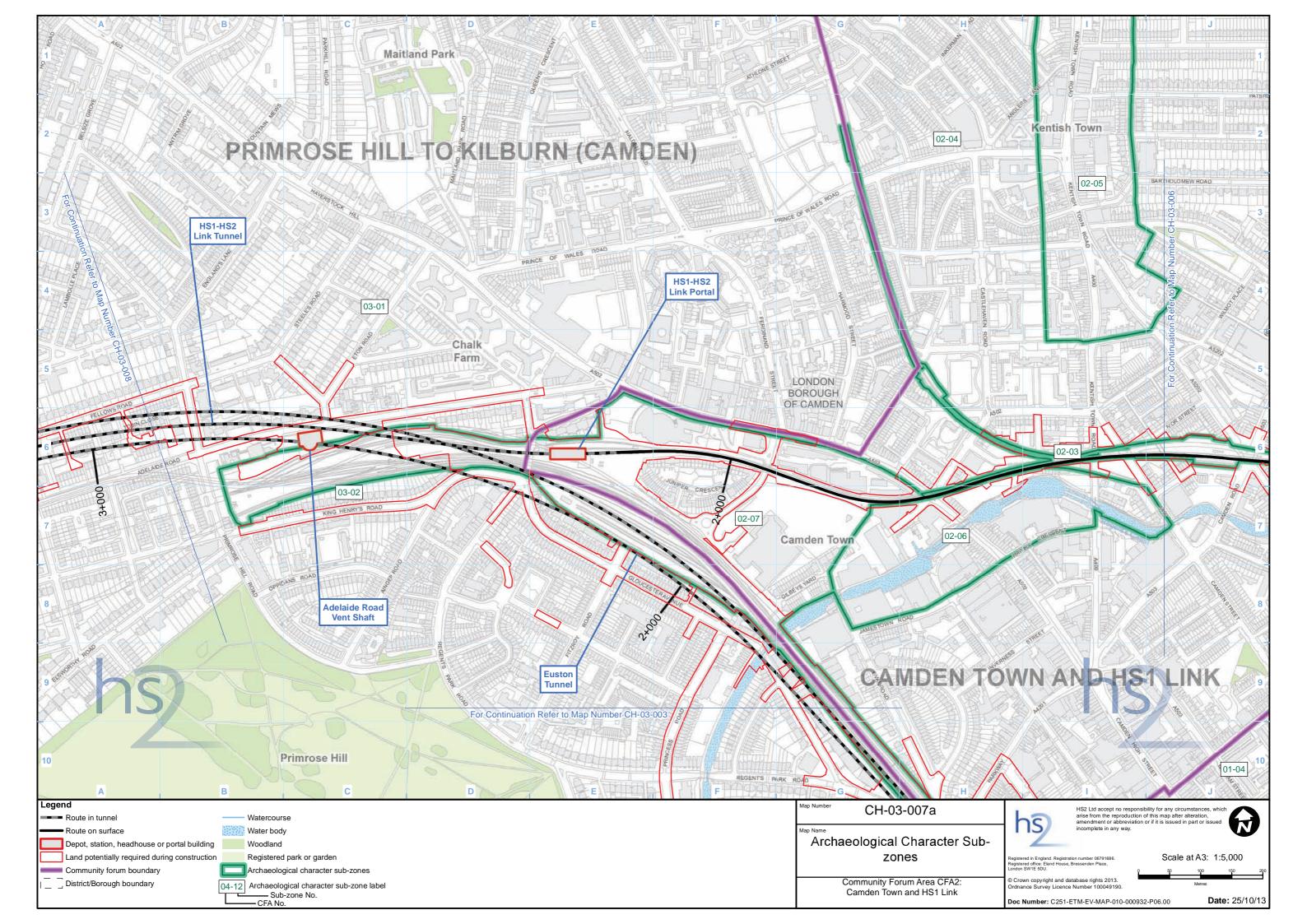














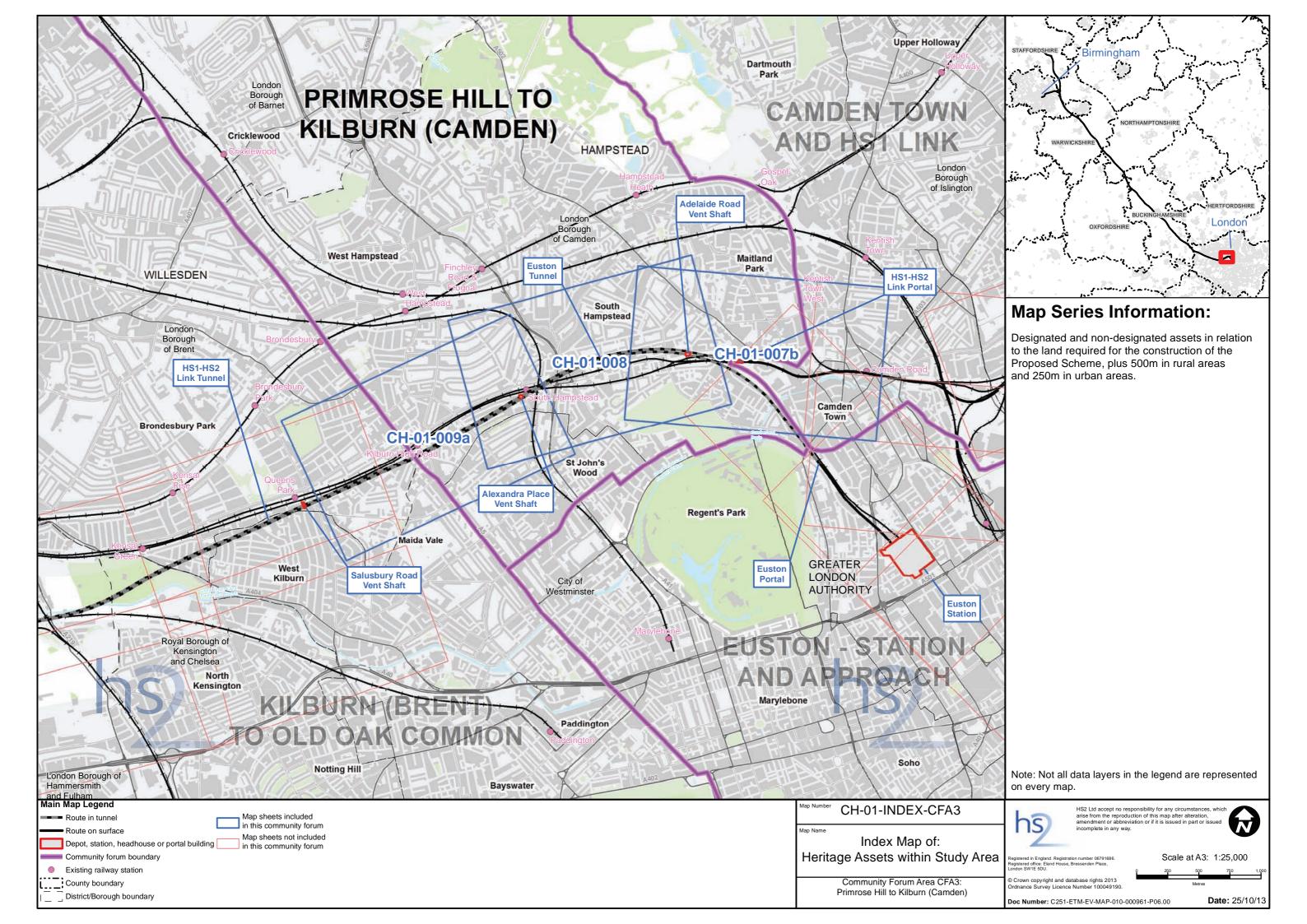
LONDON-WEST MIDLANDS ENVIRONMENTAL STATEMENT

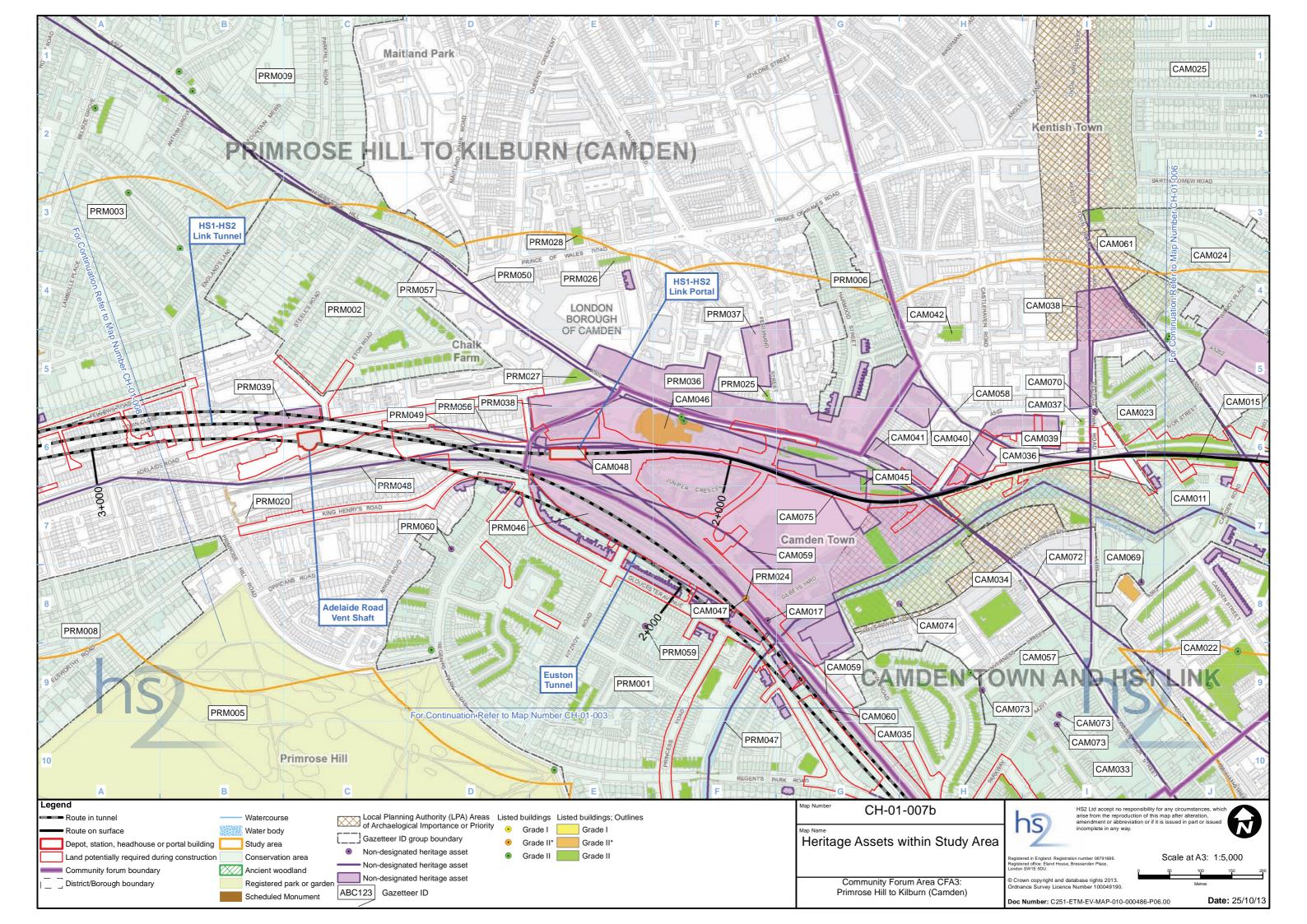
CFA₃ Primrose Hill to Camden (Kilburn)

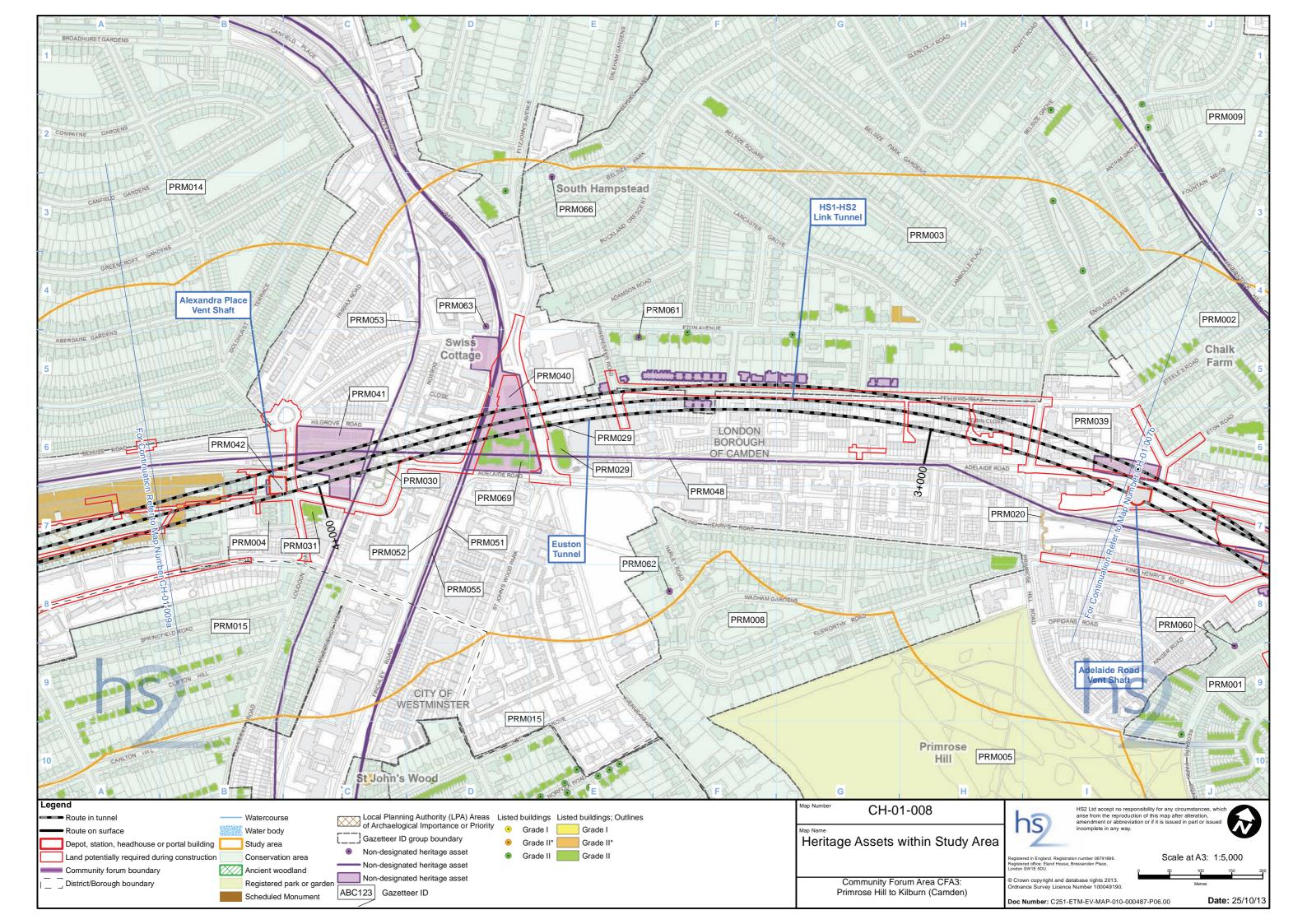
CH-o1 - Heritage Assets within Study Area

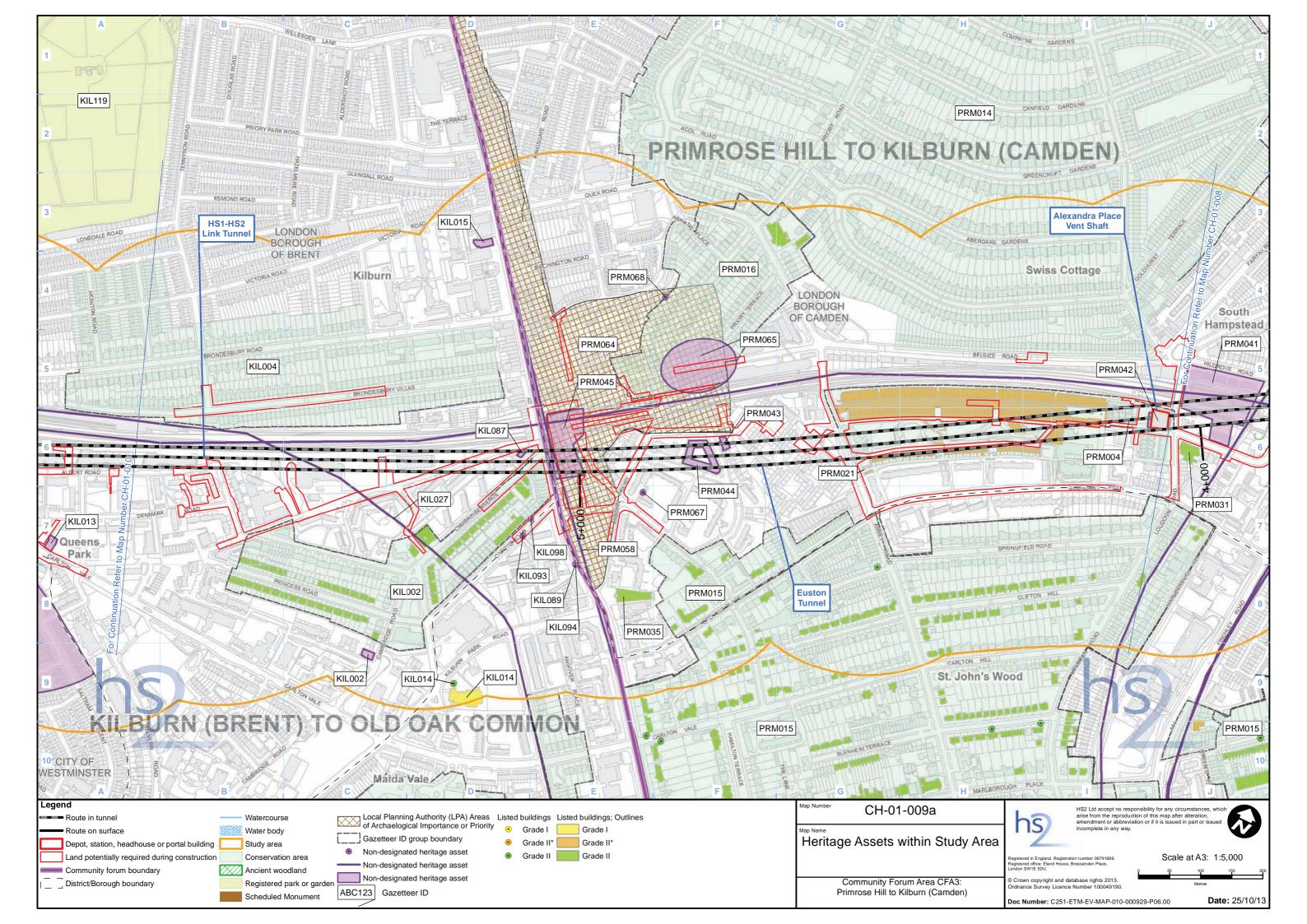
CH-o2 - Designated Heritage Assets

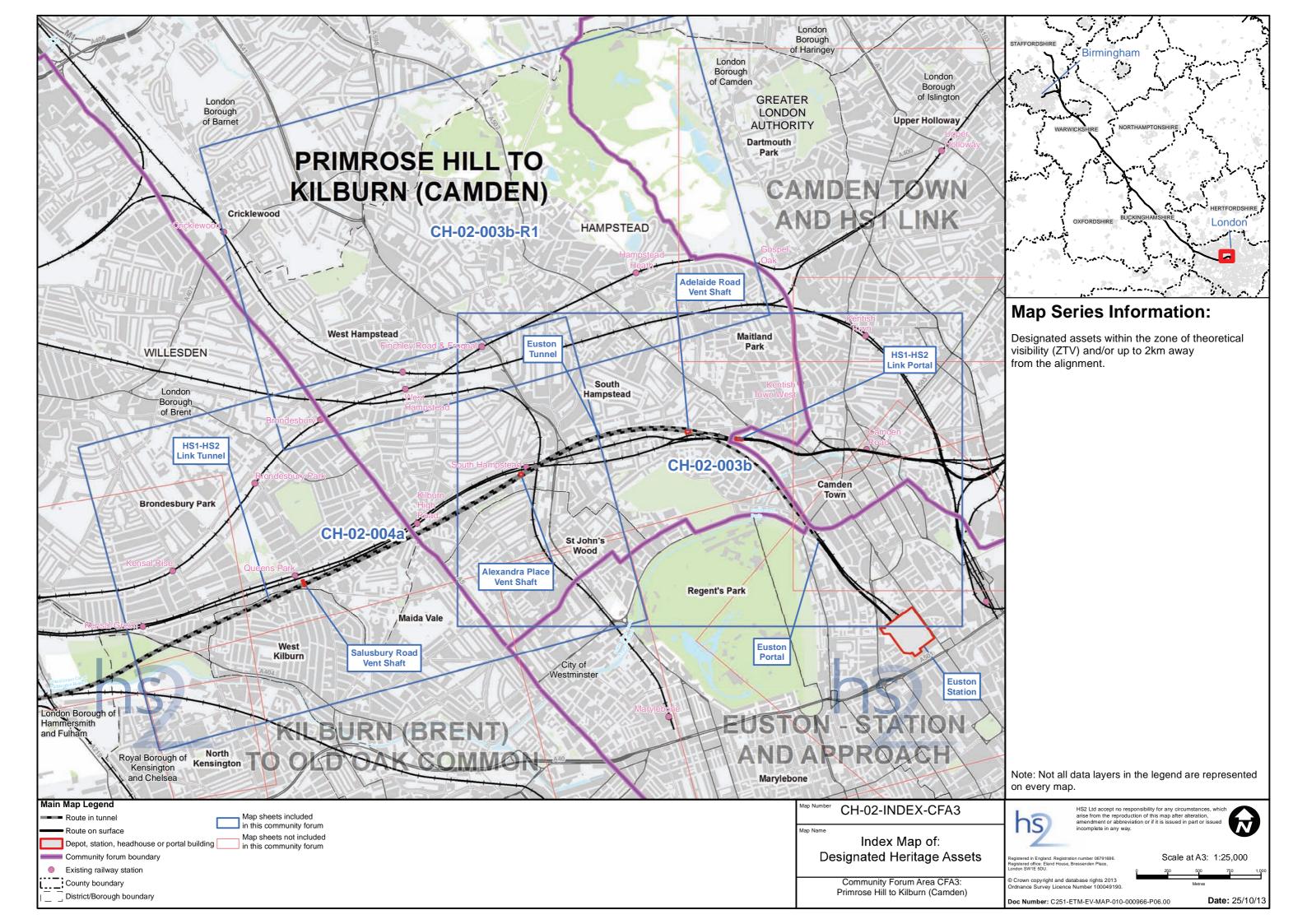
CH-o3 - Archaeological Character Sub-zones

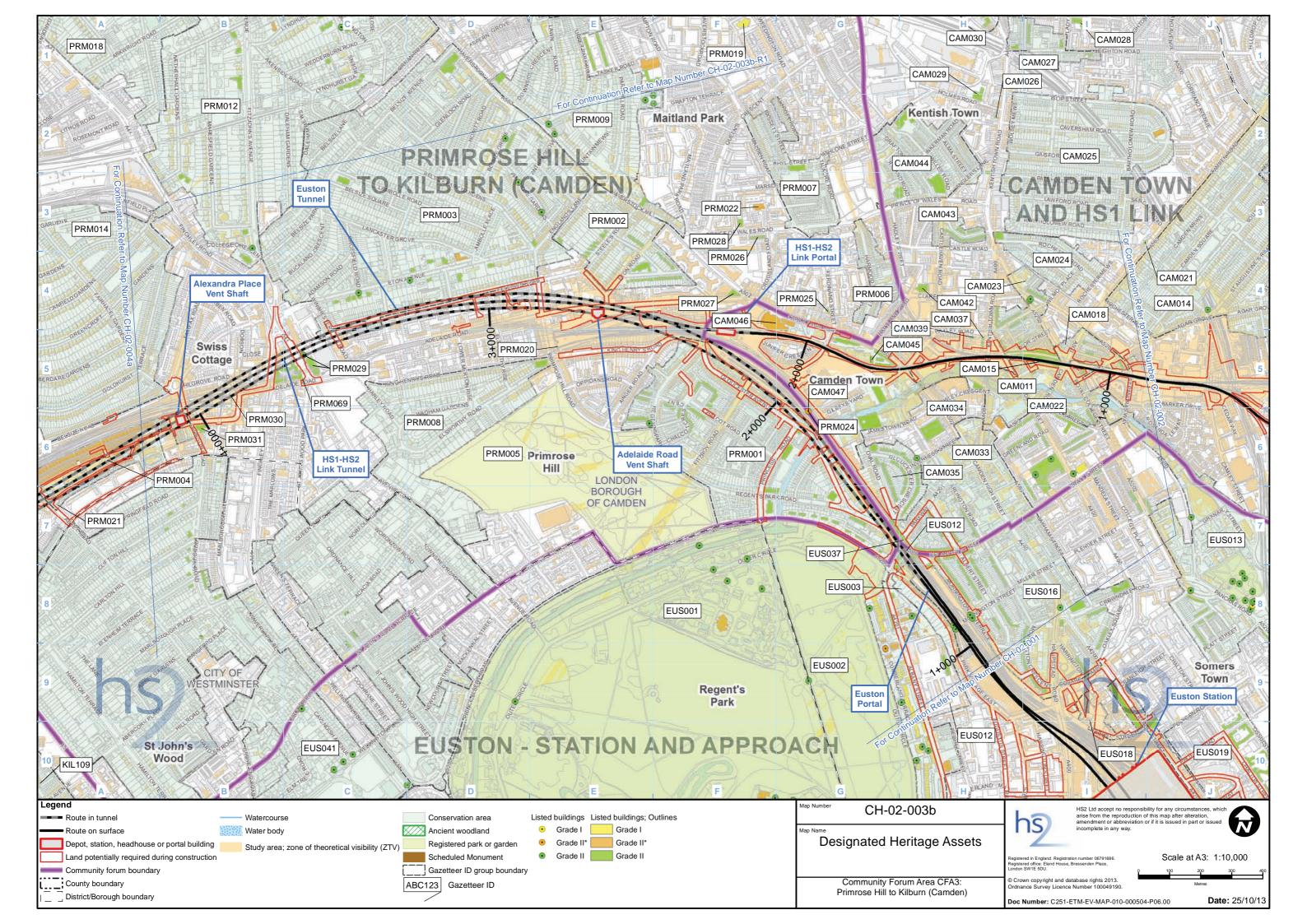


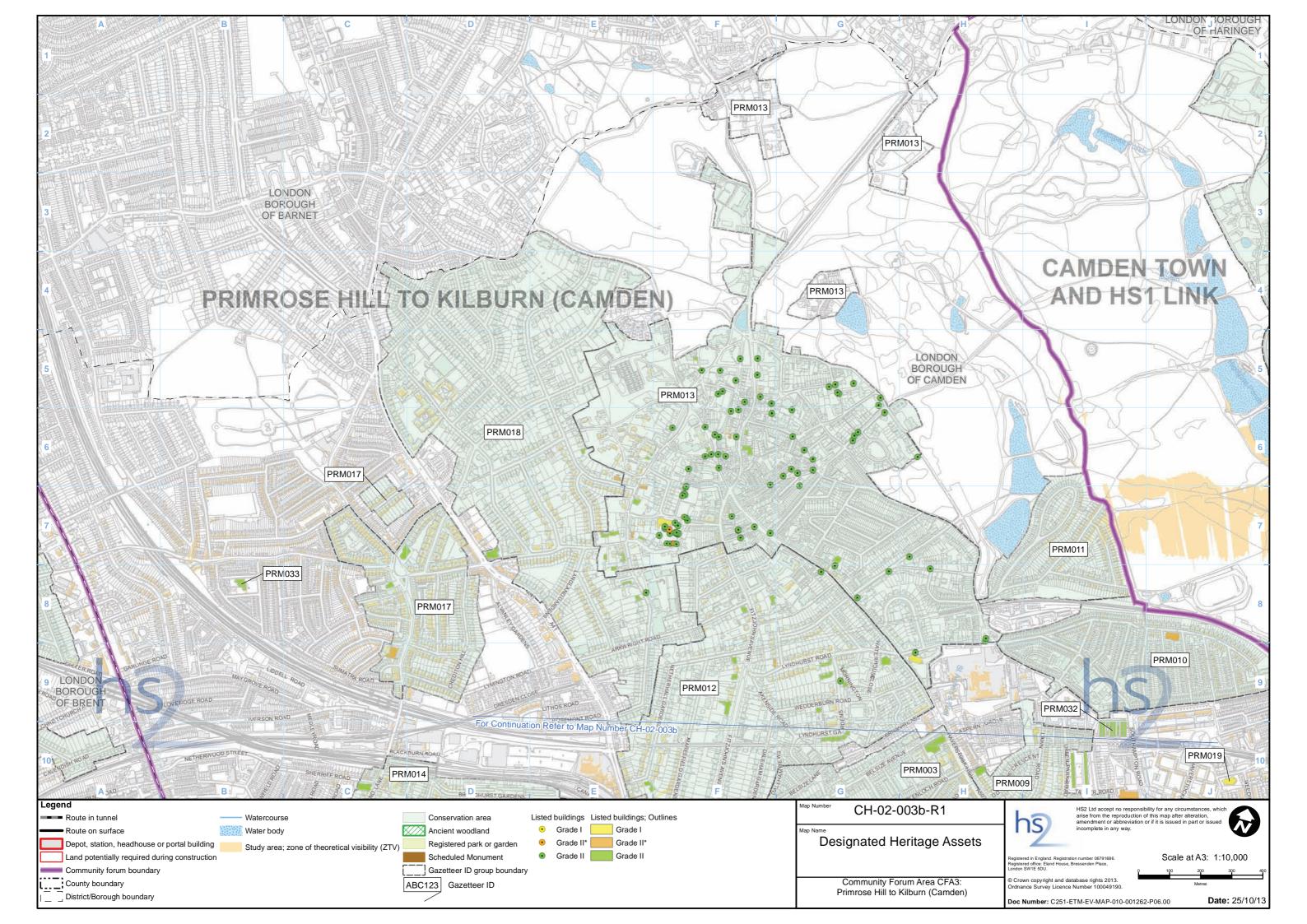


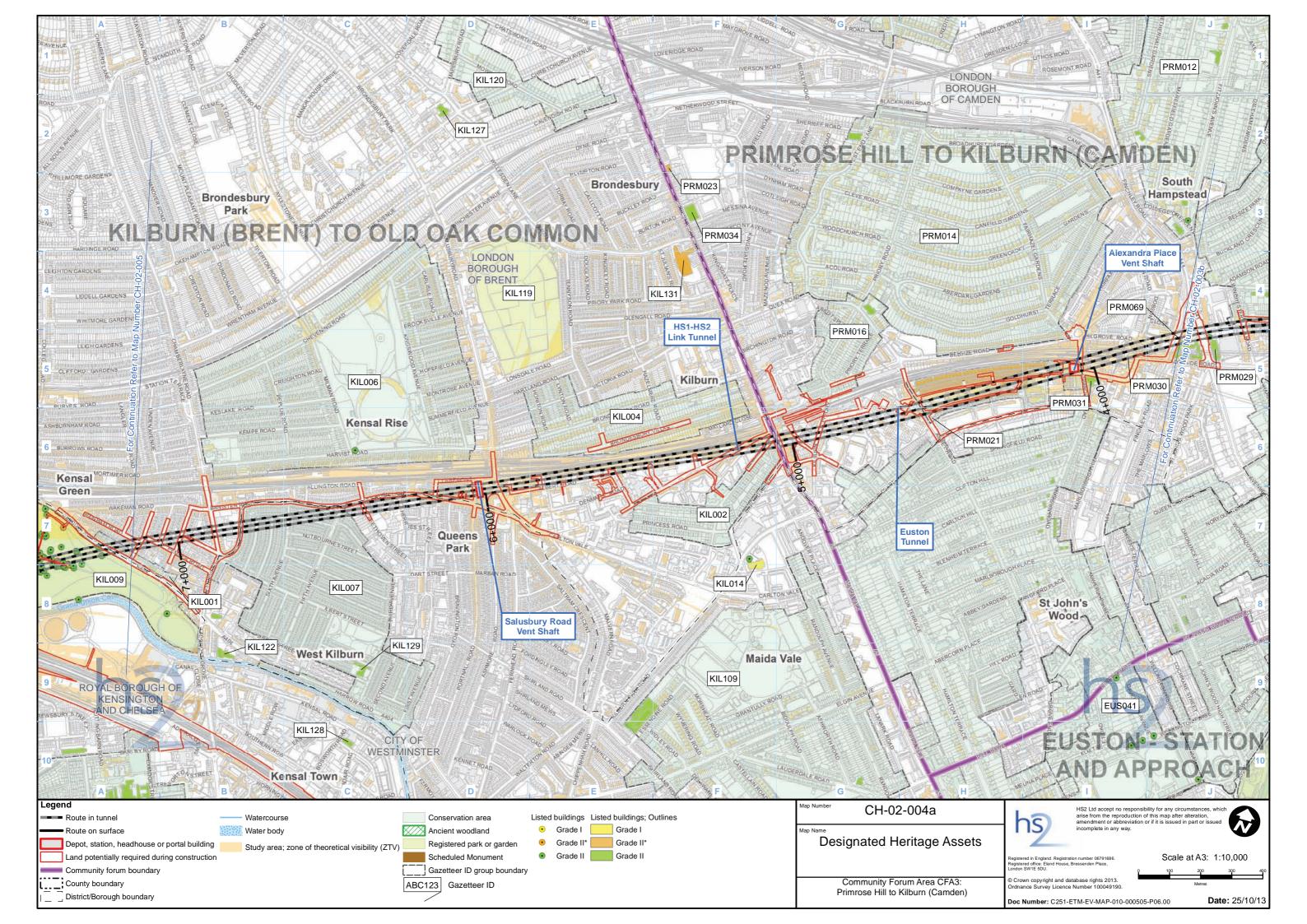


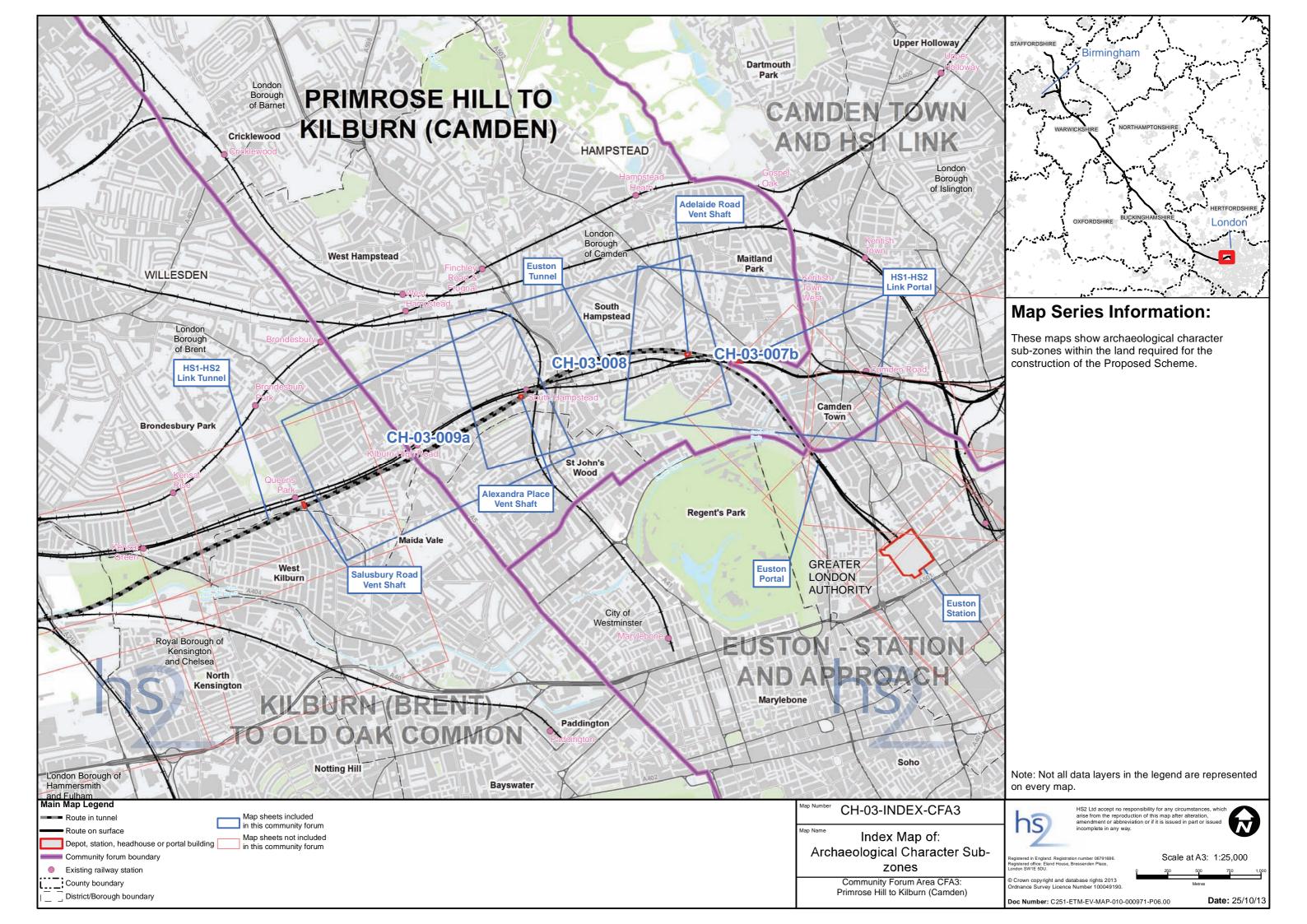


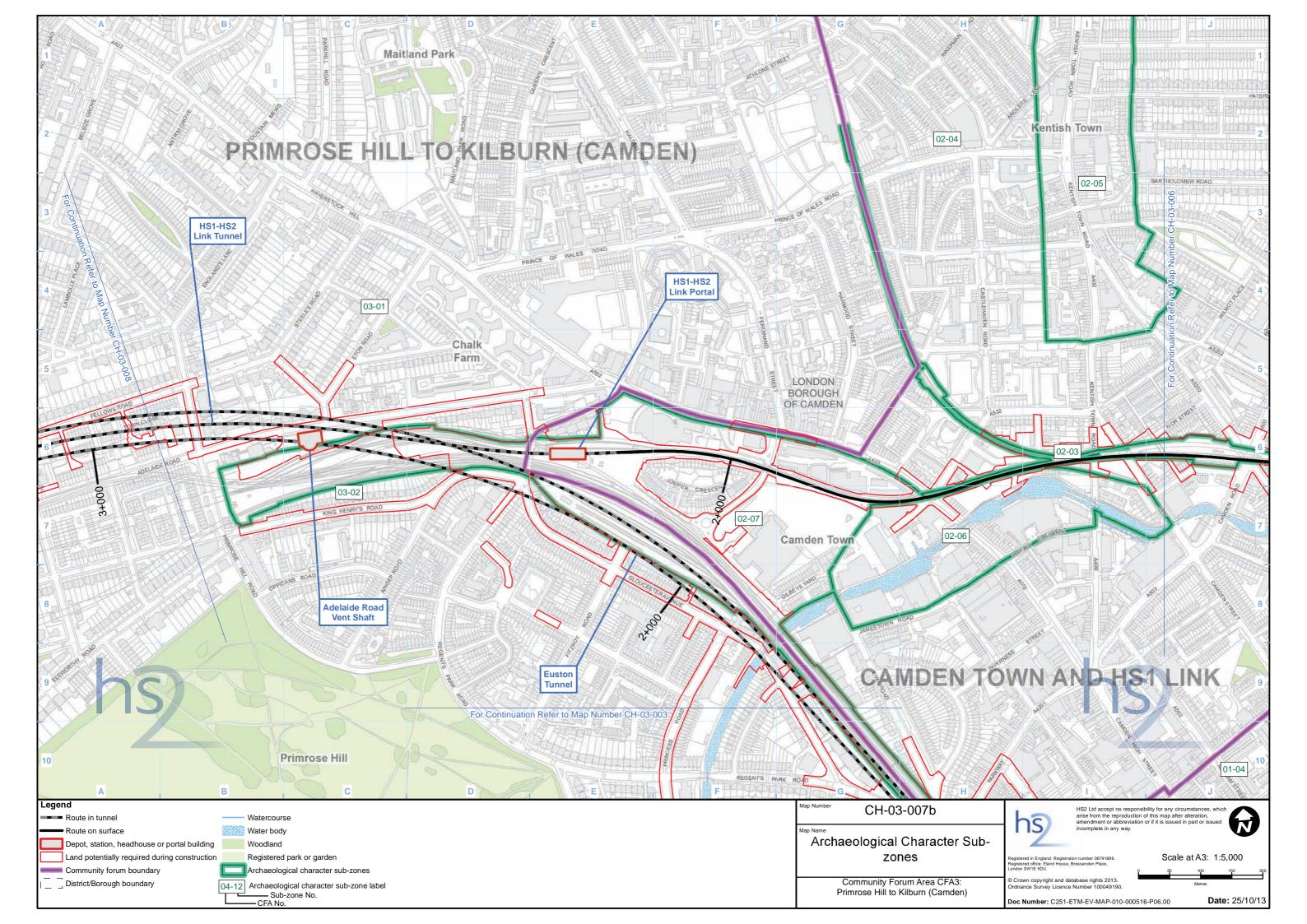


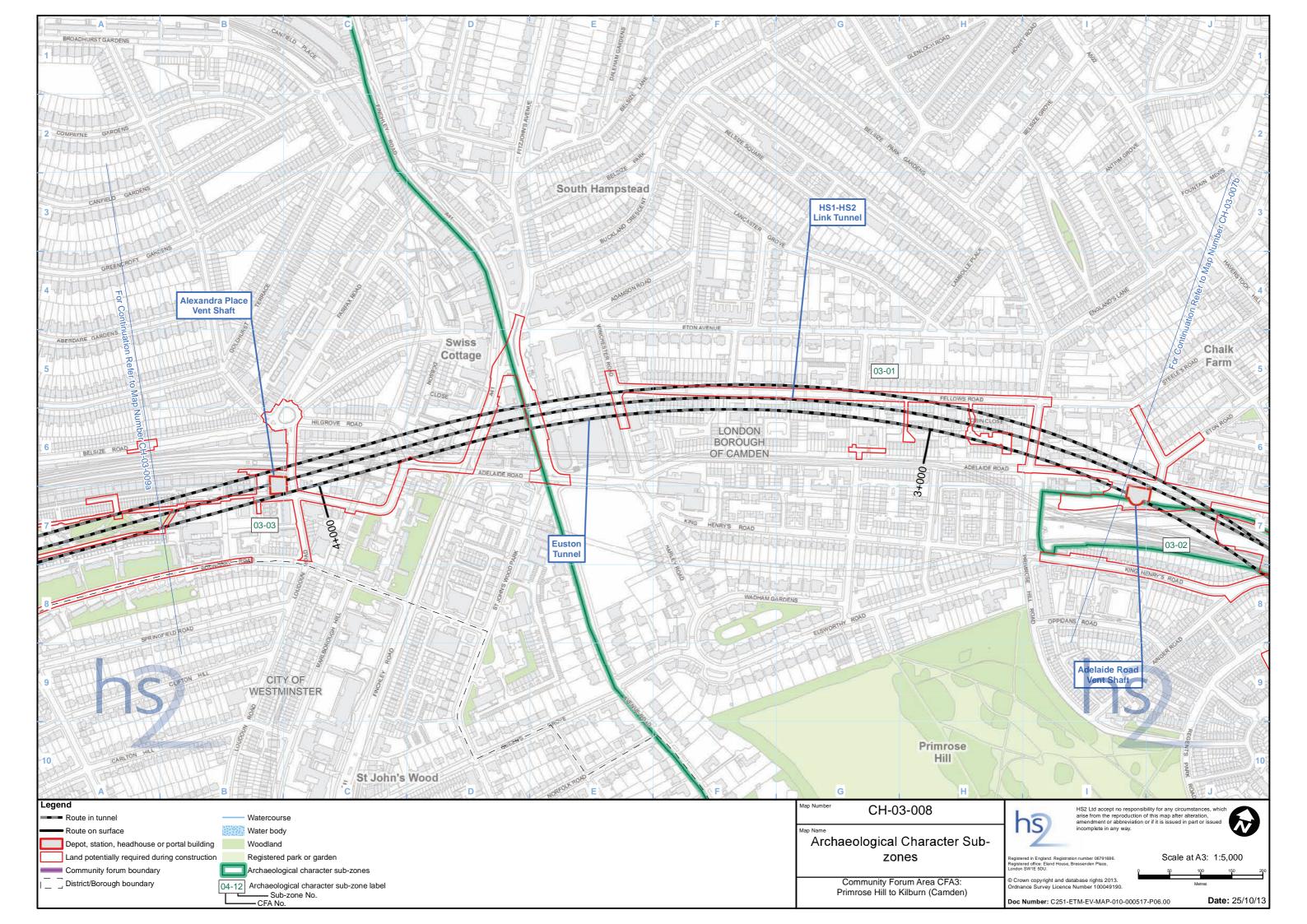


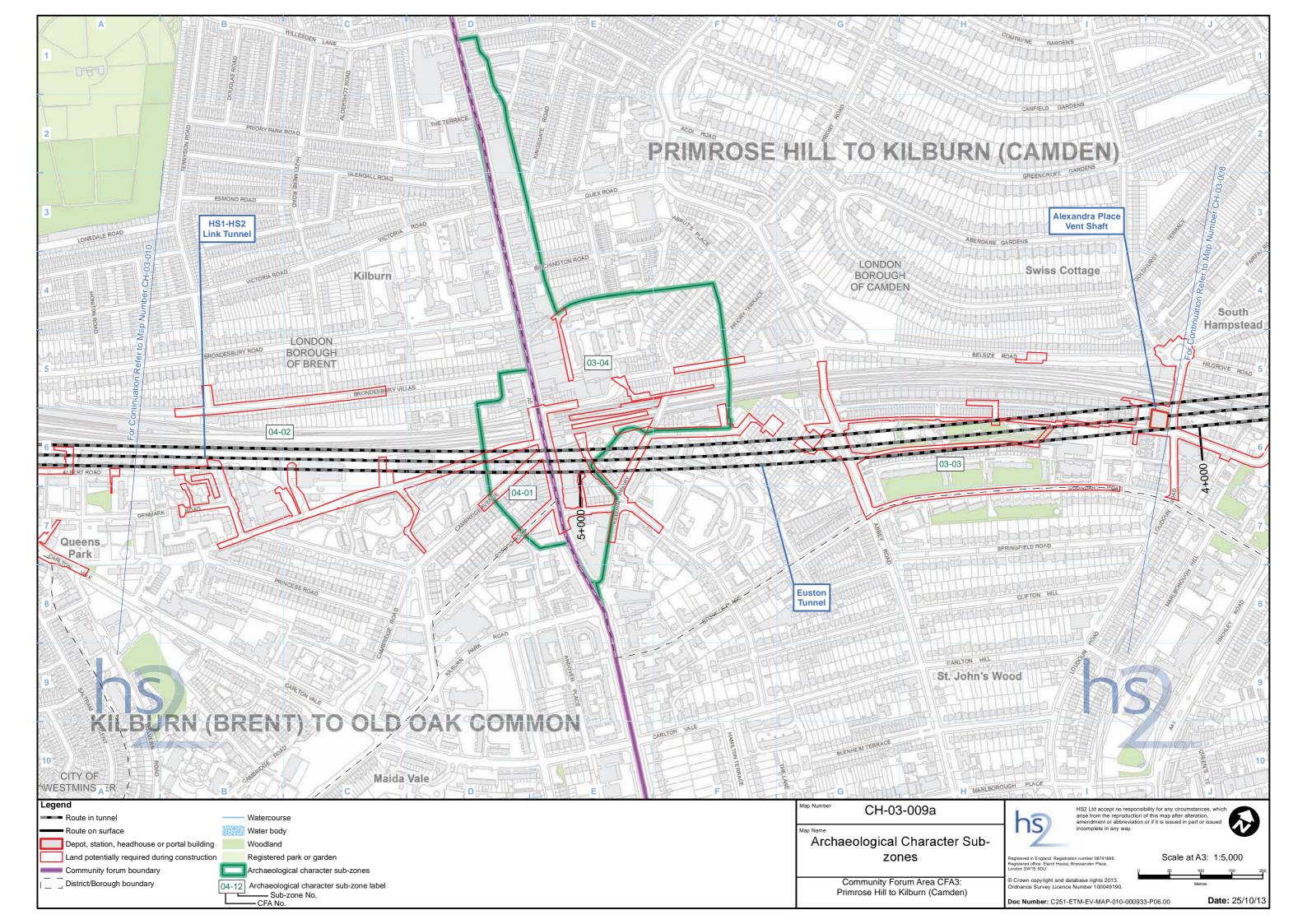












This page is left intentionally blank



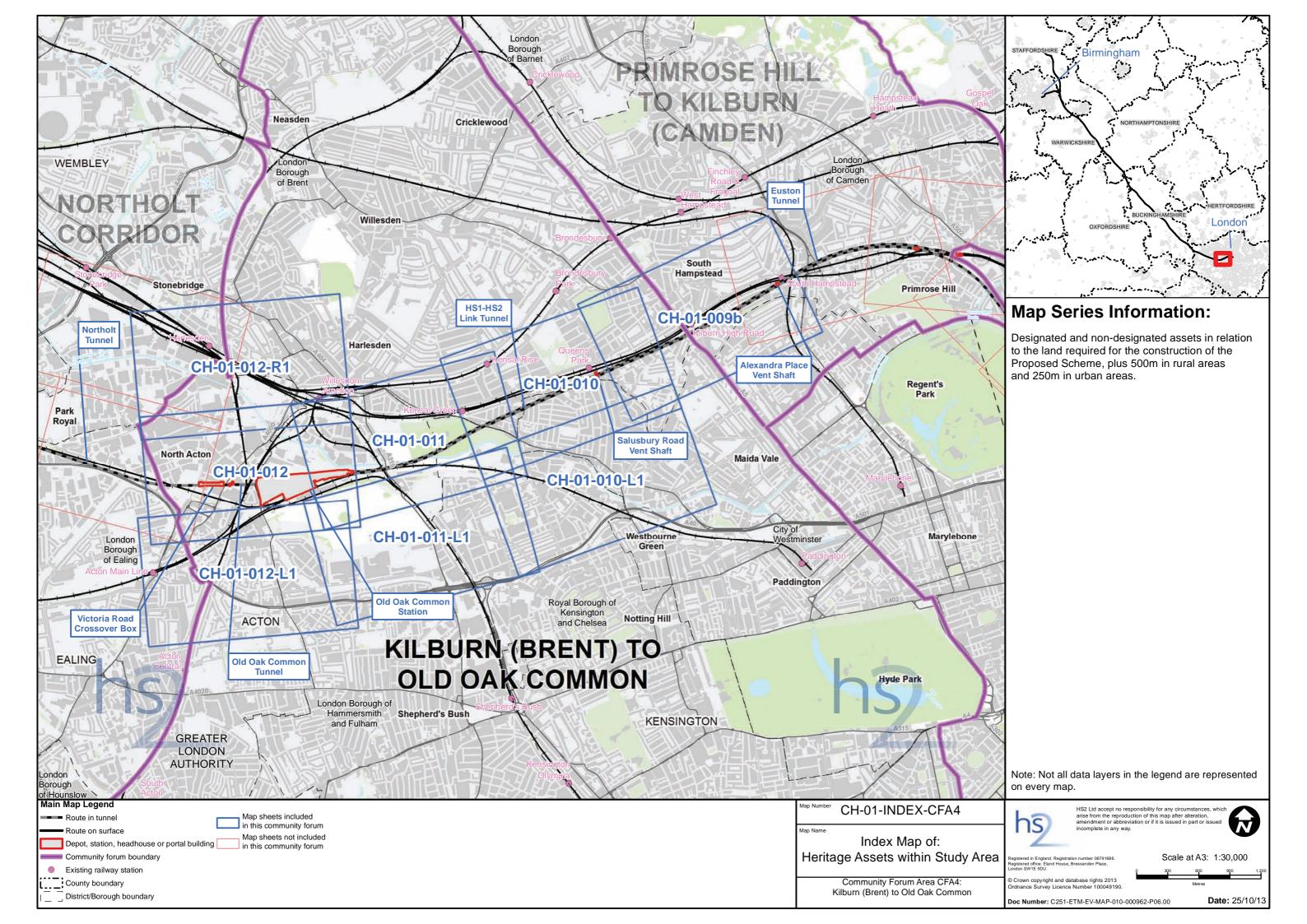
LONDON-WEST MIDLANDS ENVIRONMENTAL STATEMENT

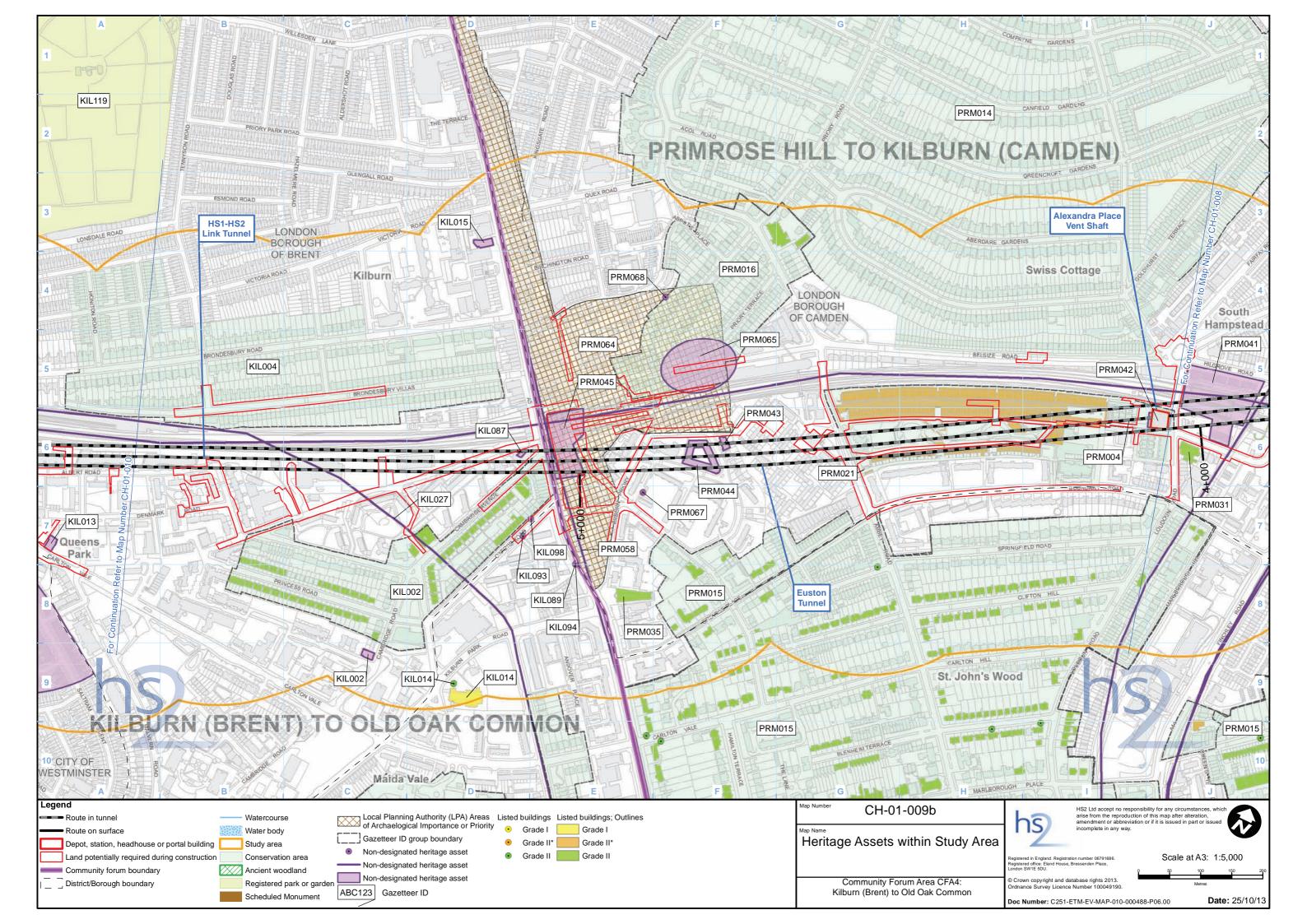
CFA4 Kilburn (Brent) to Old Oak Common

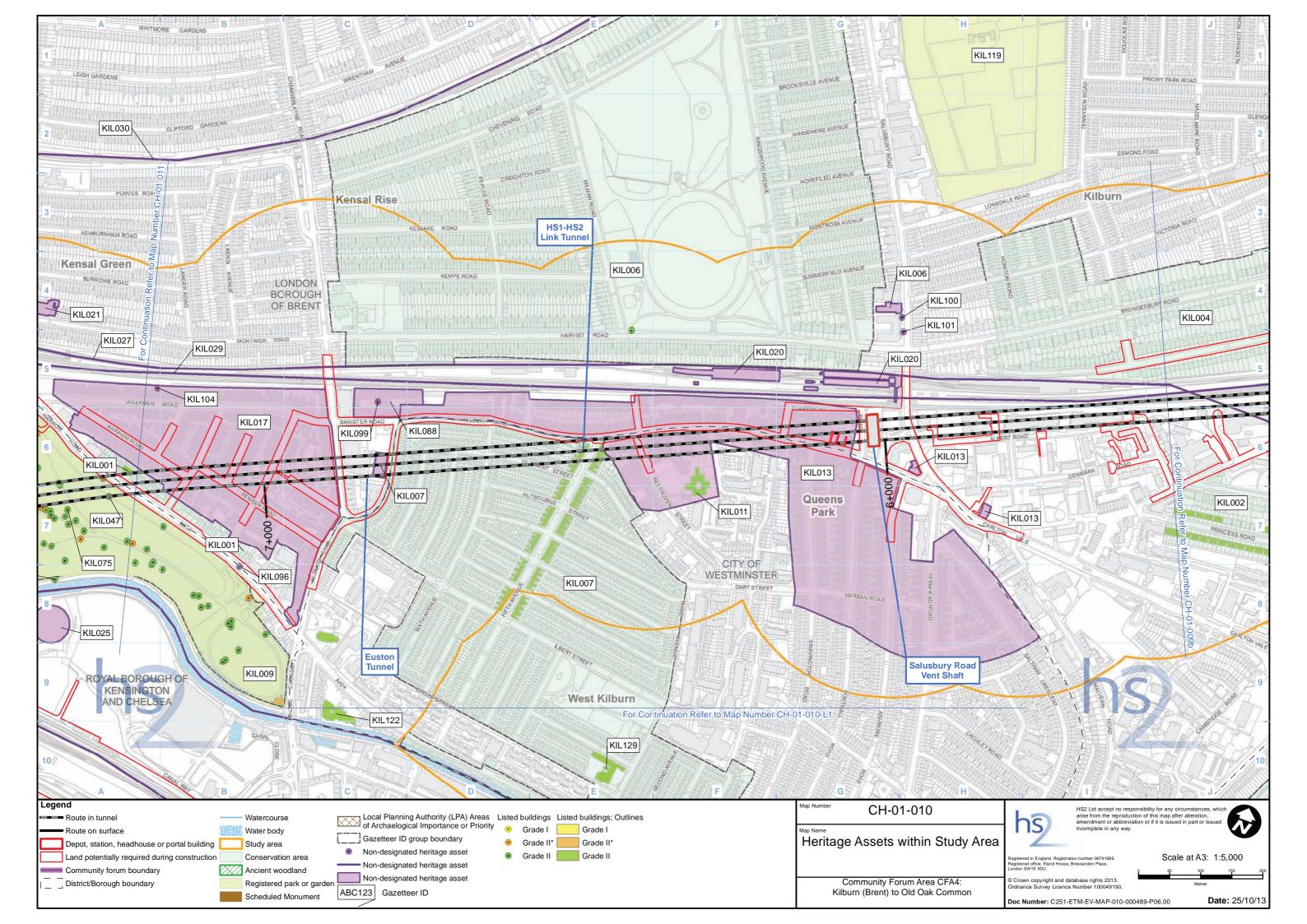
CH-o1 - Heritage Assets within Study Area

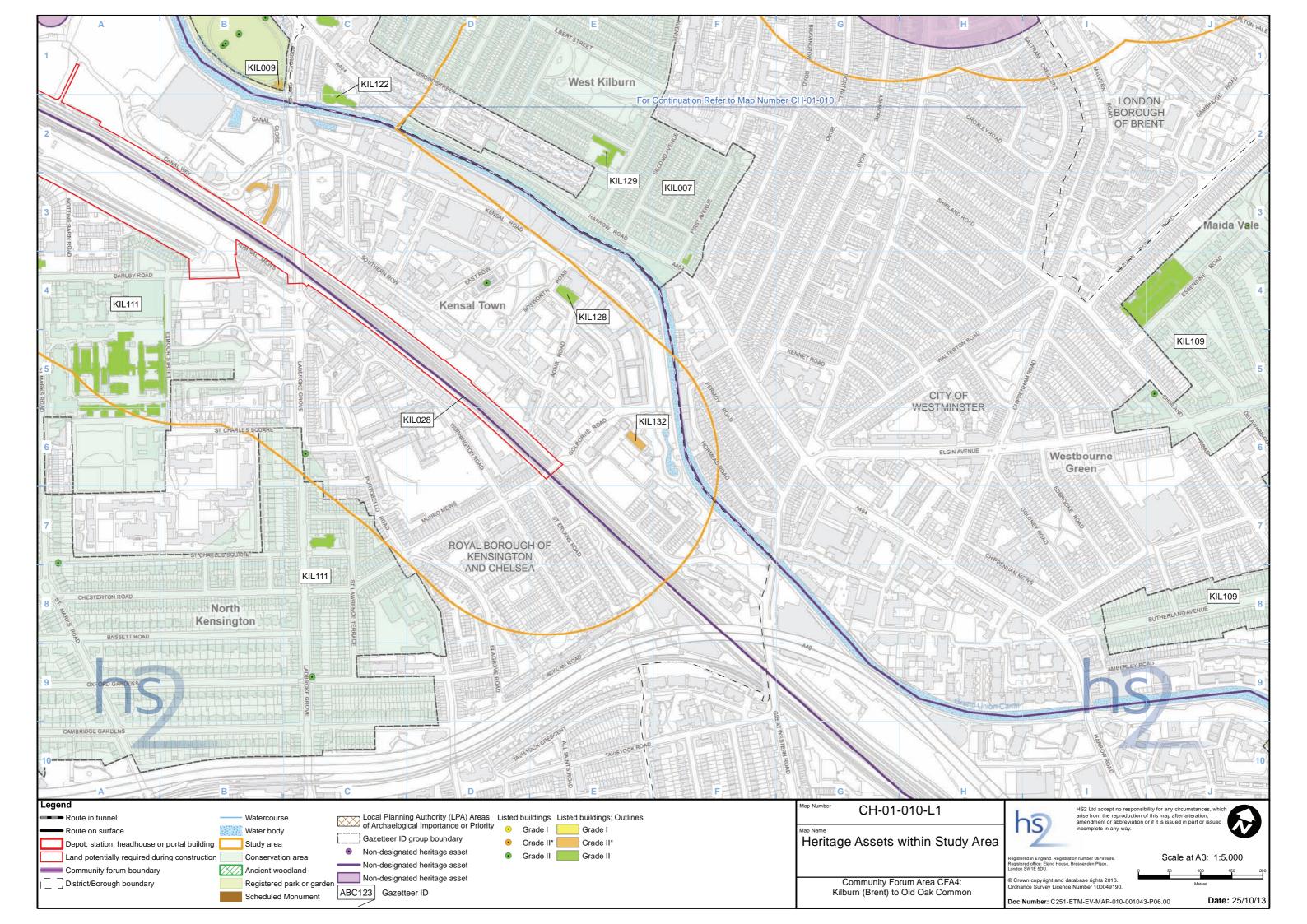
CH-o2 - Designated Heritage Assets

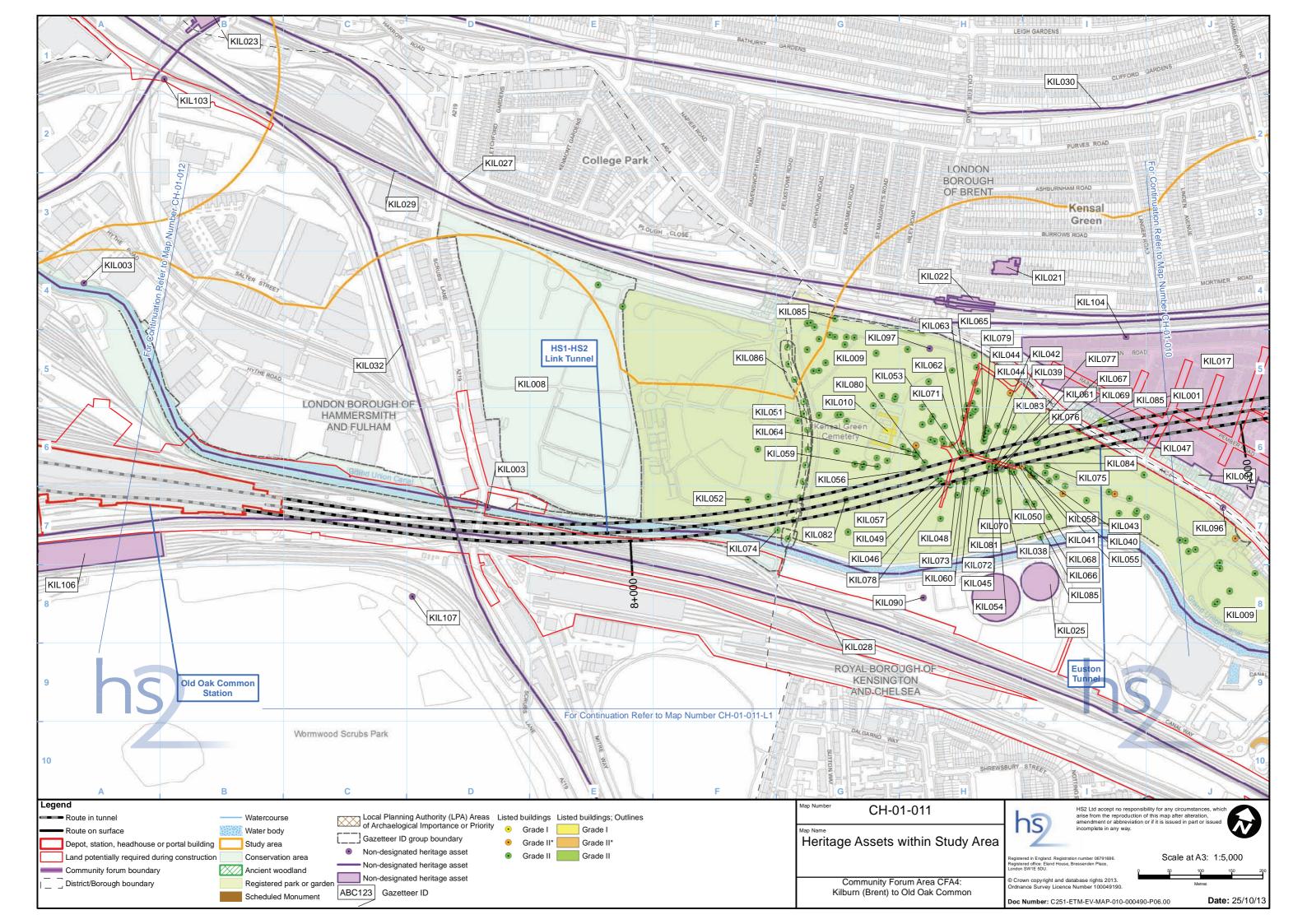
CH-o3 - Archaeological Character Sub-zones

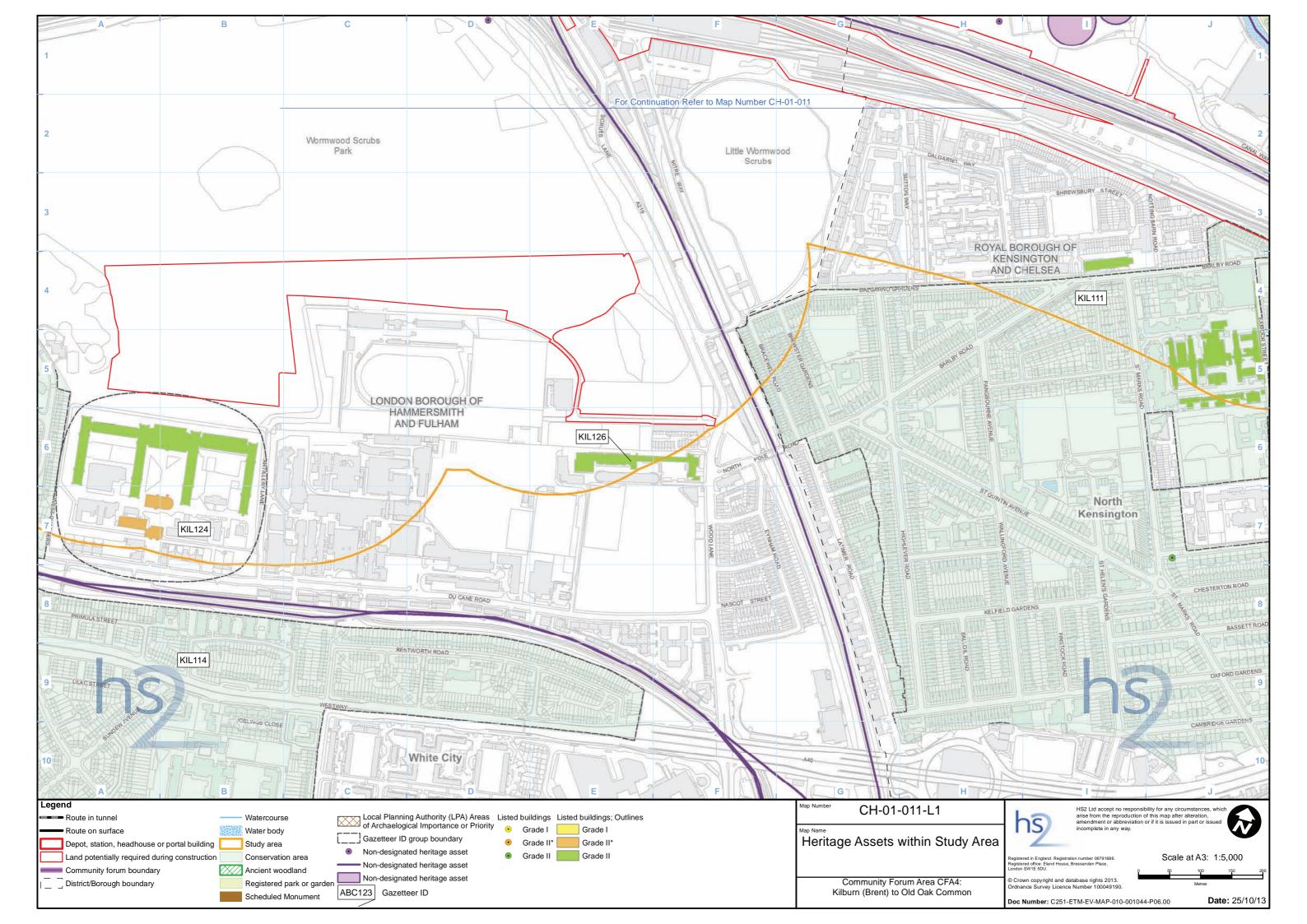


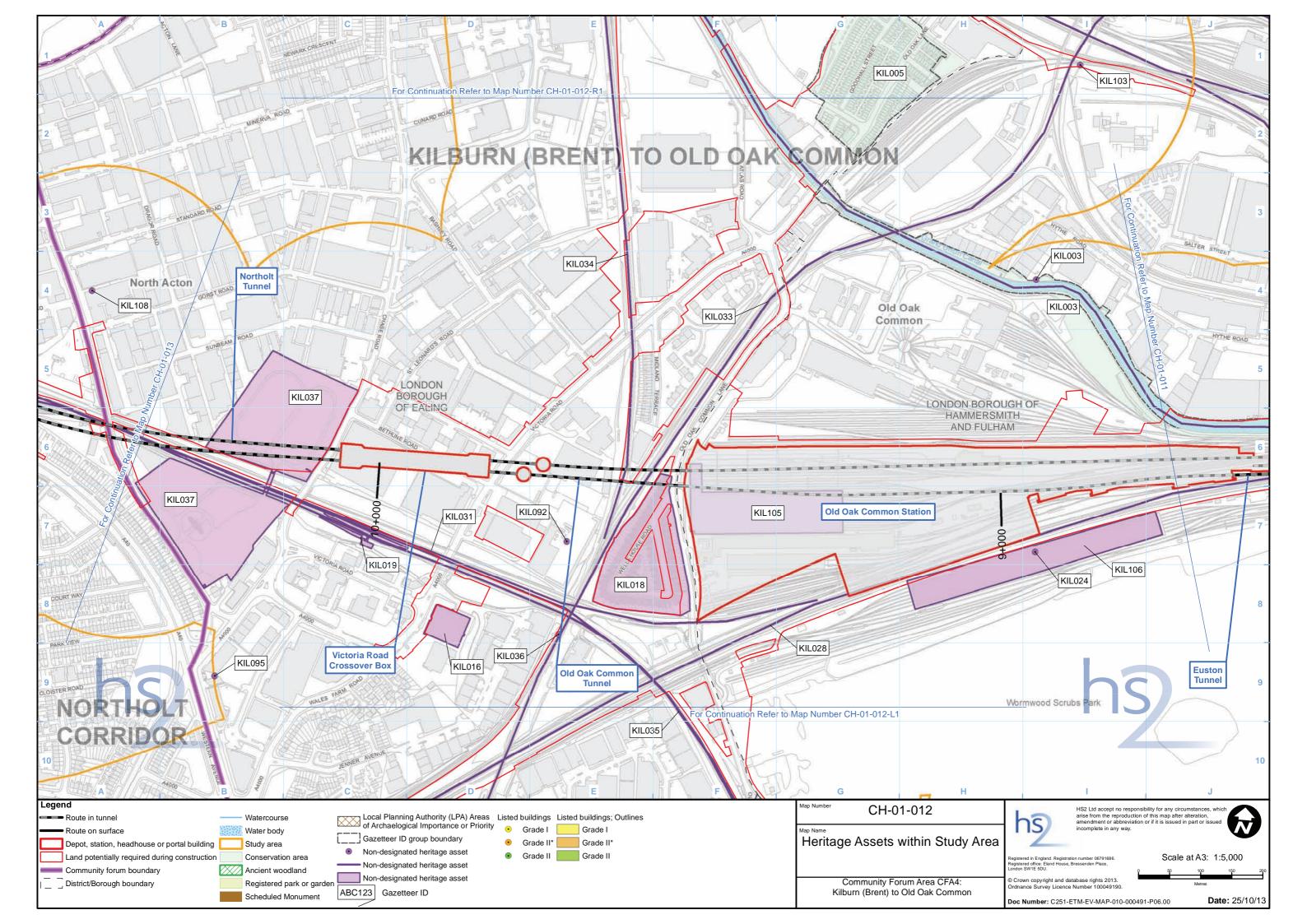


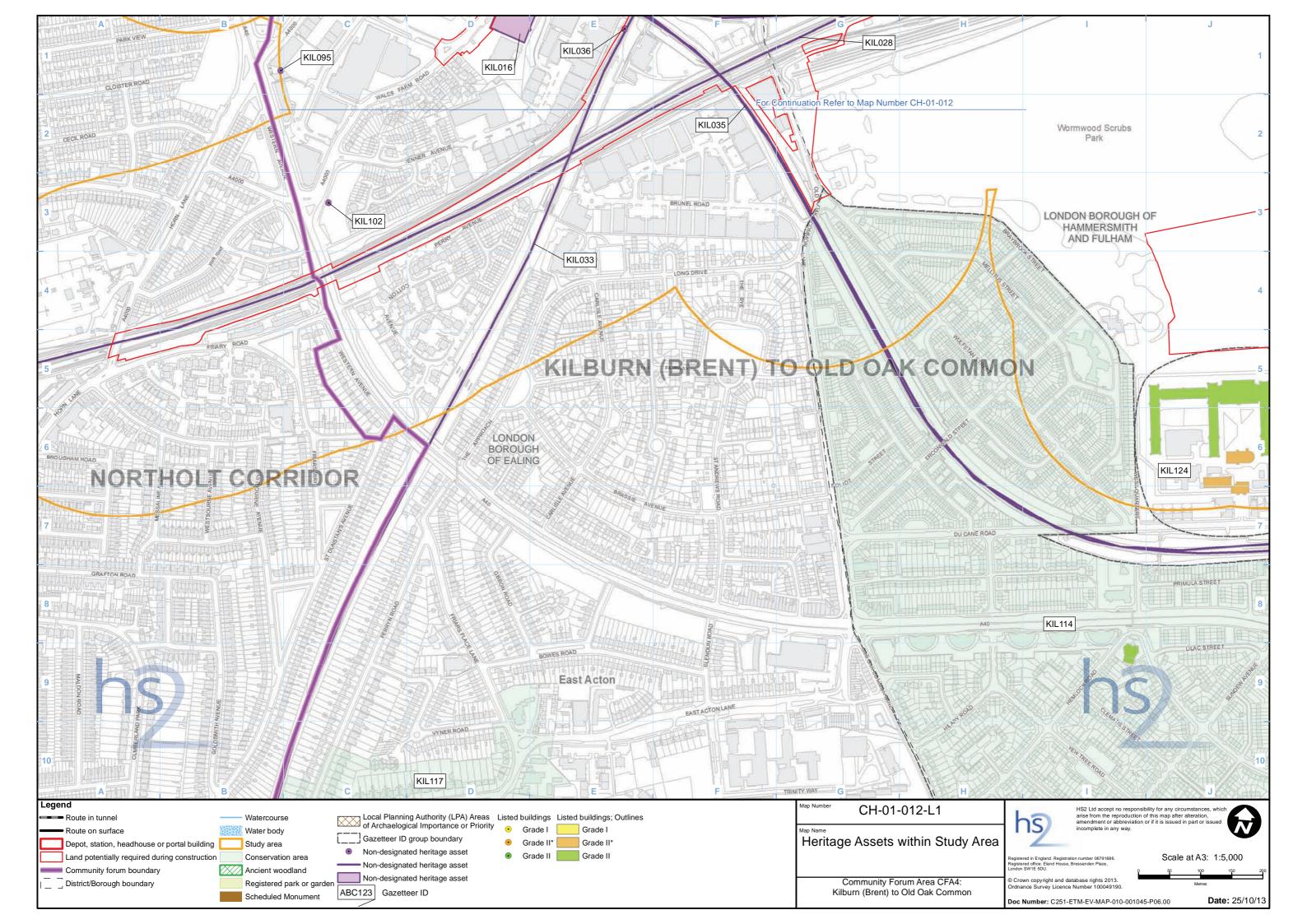


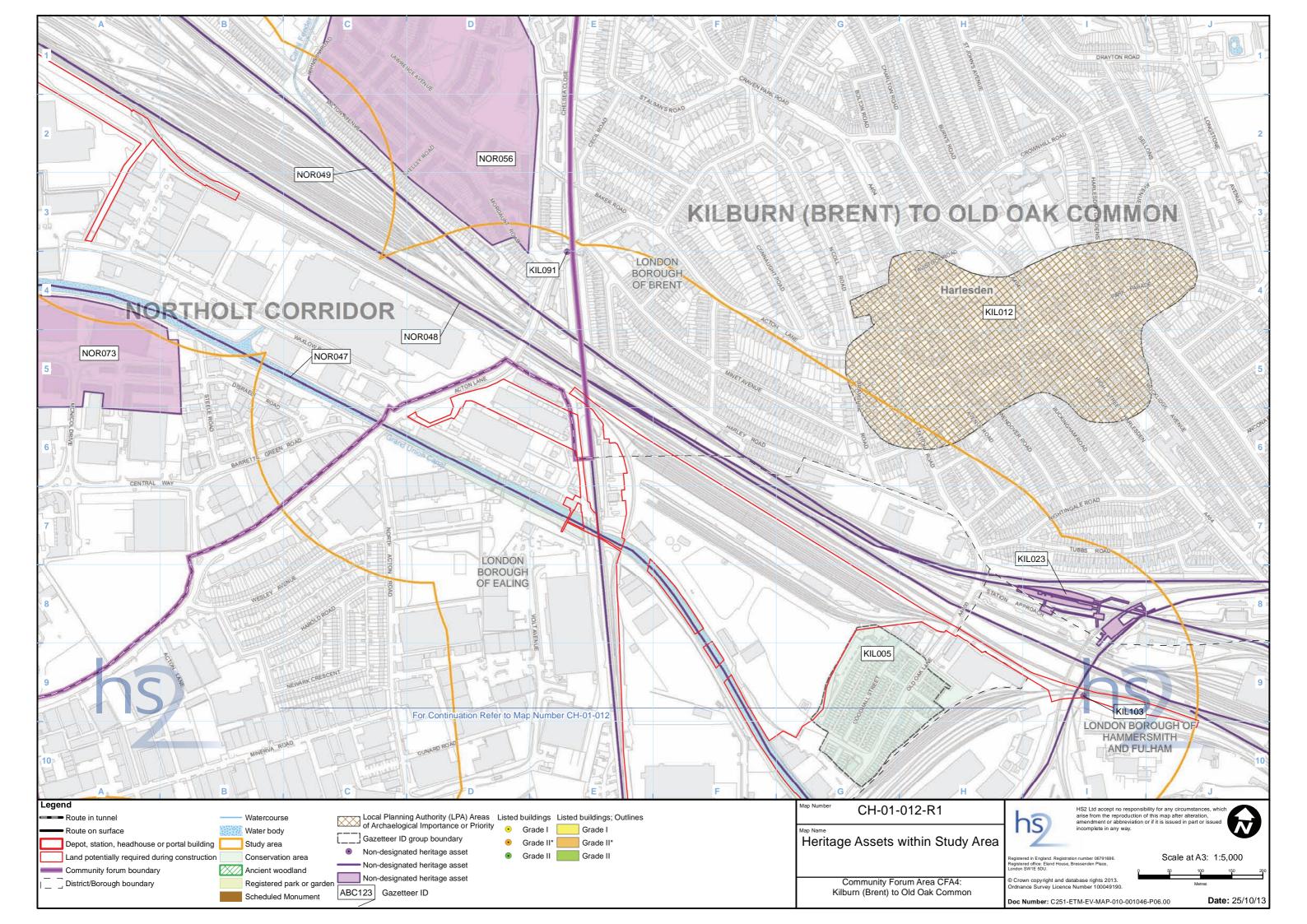




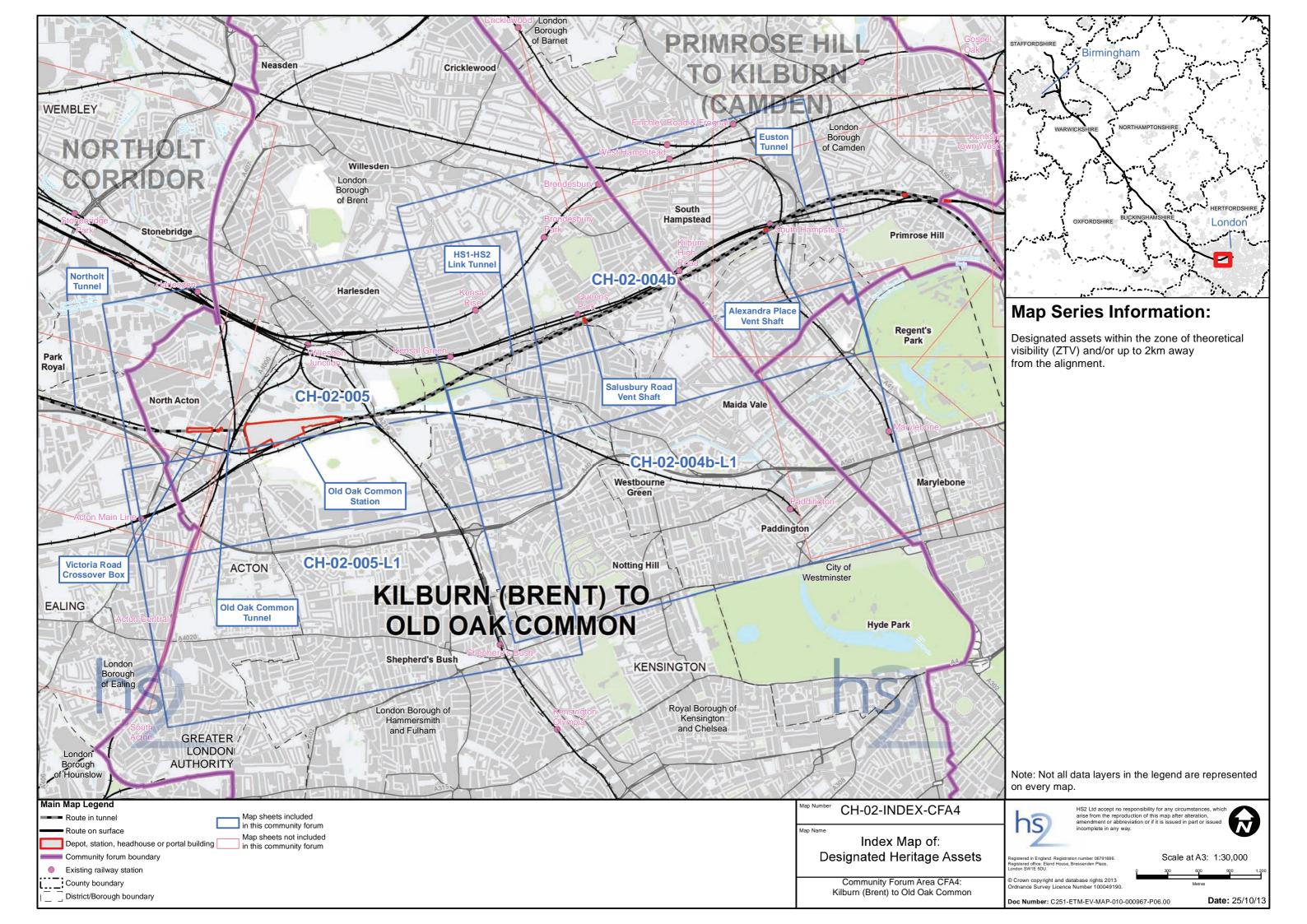


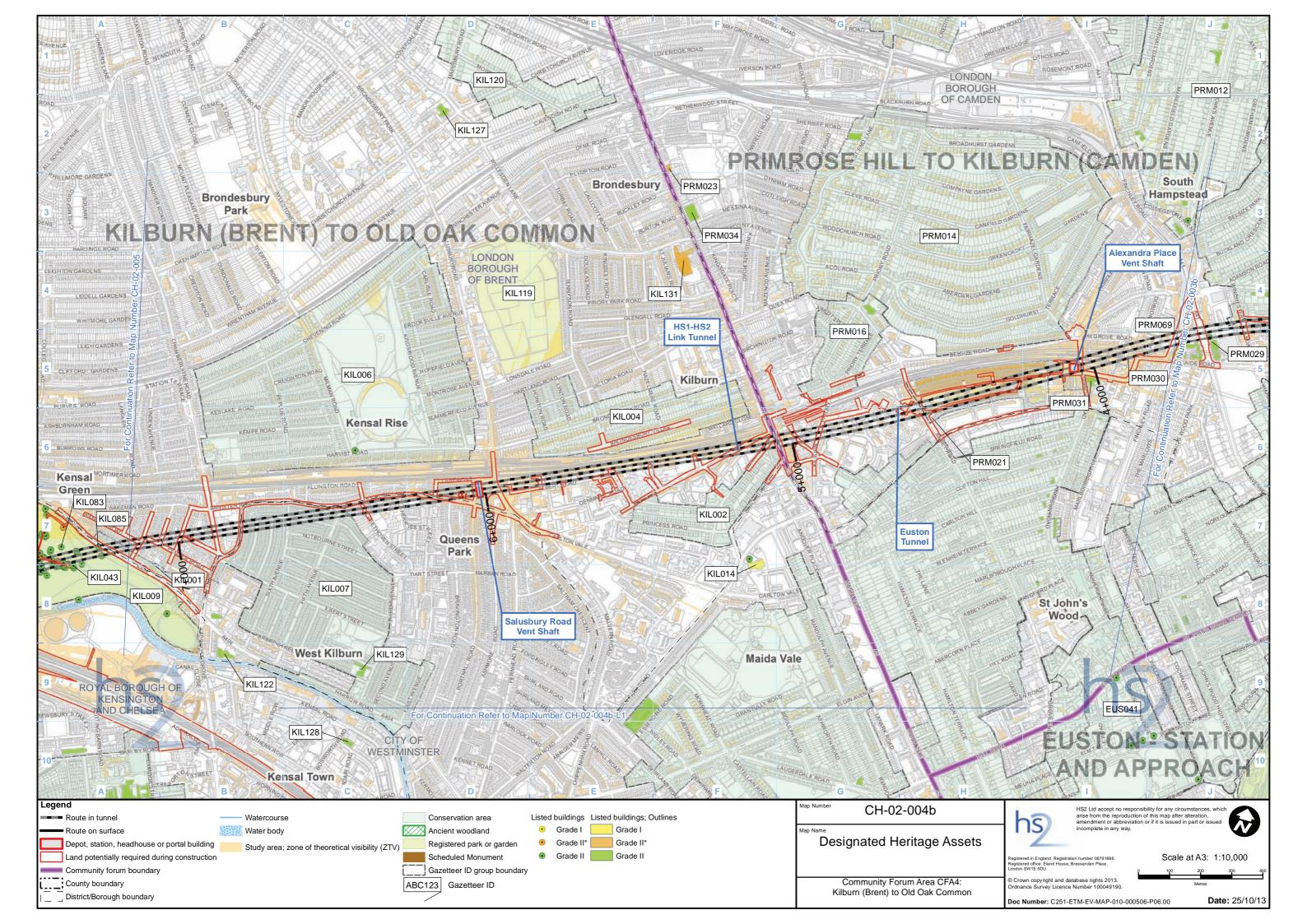


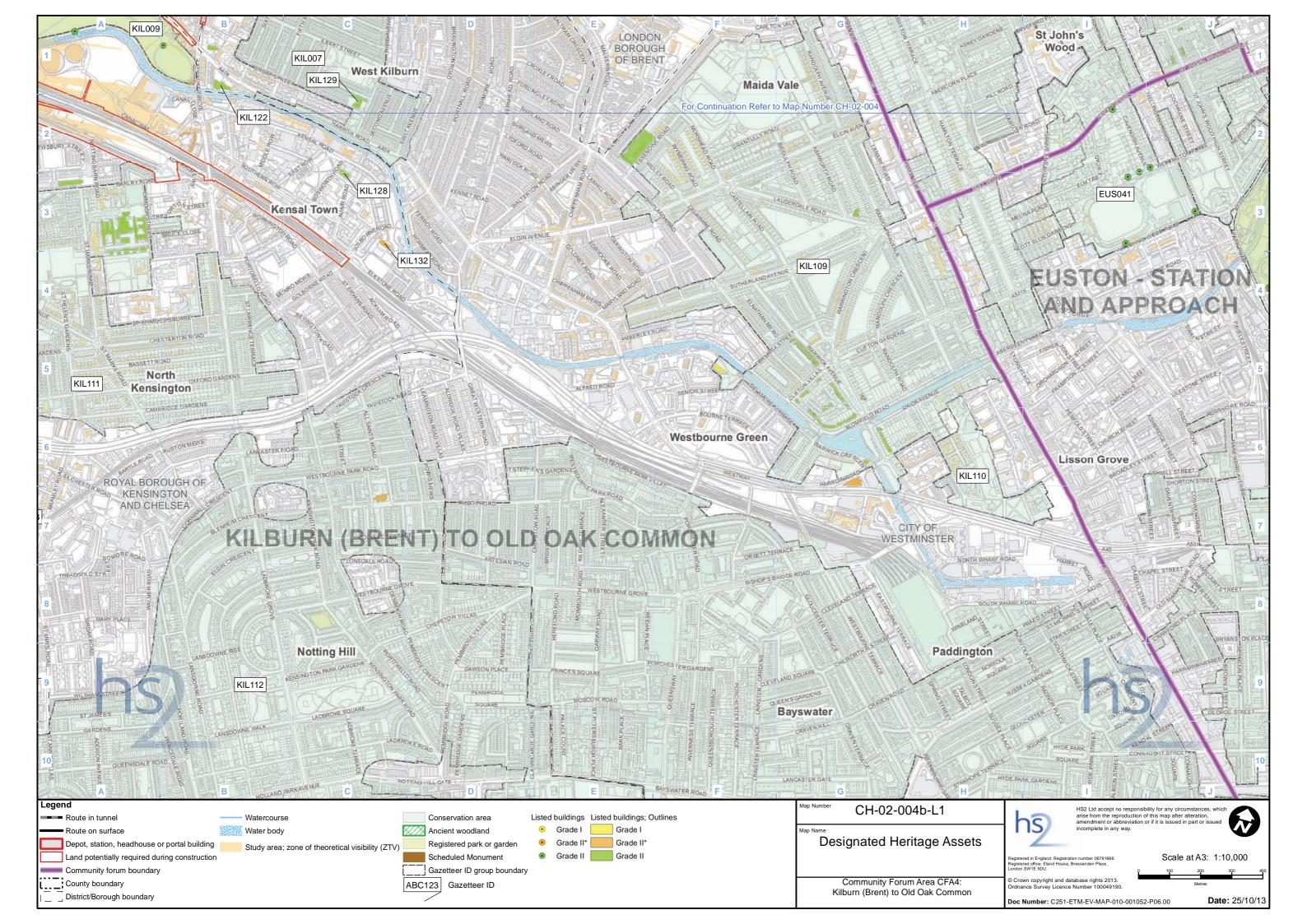


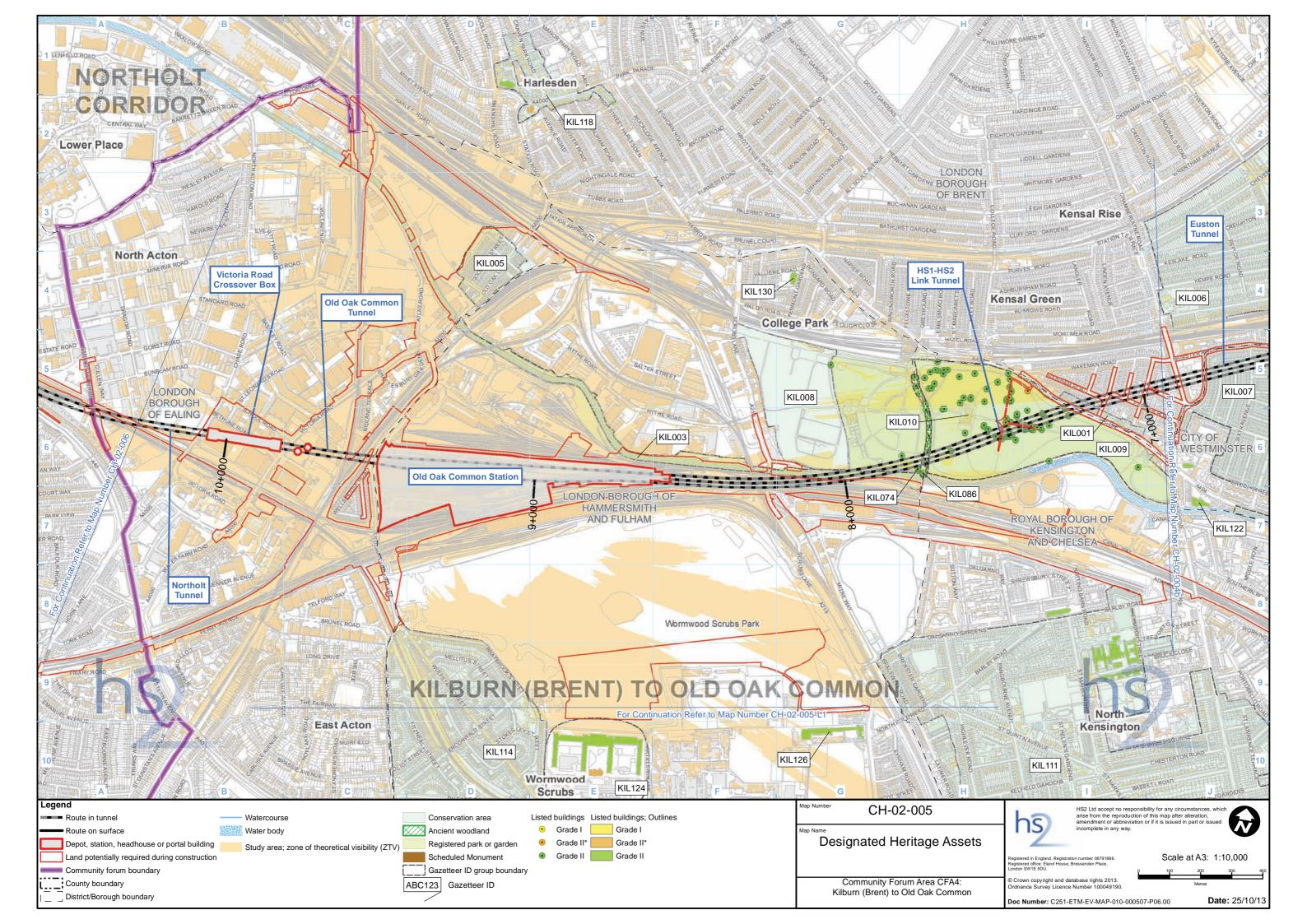


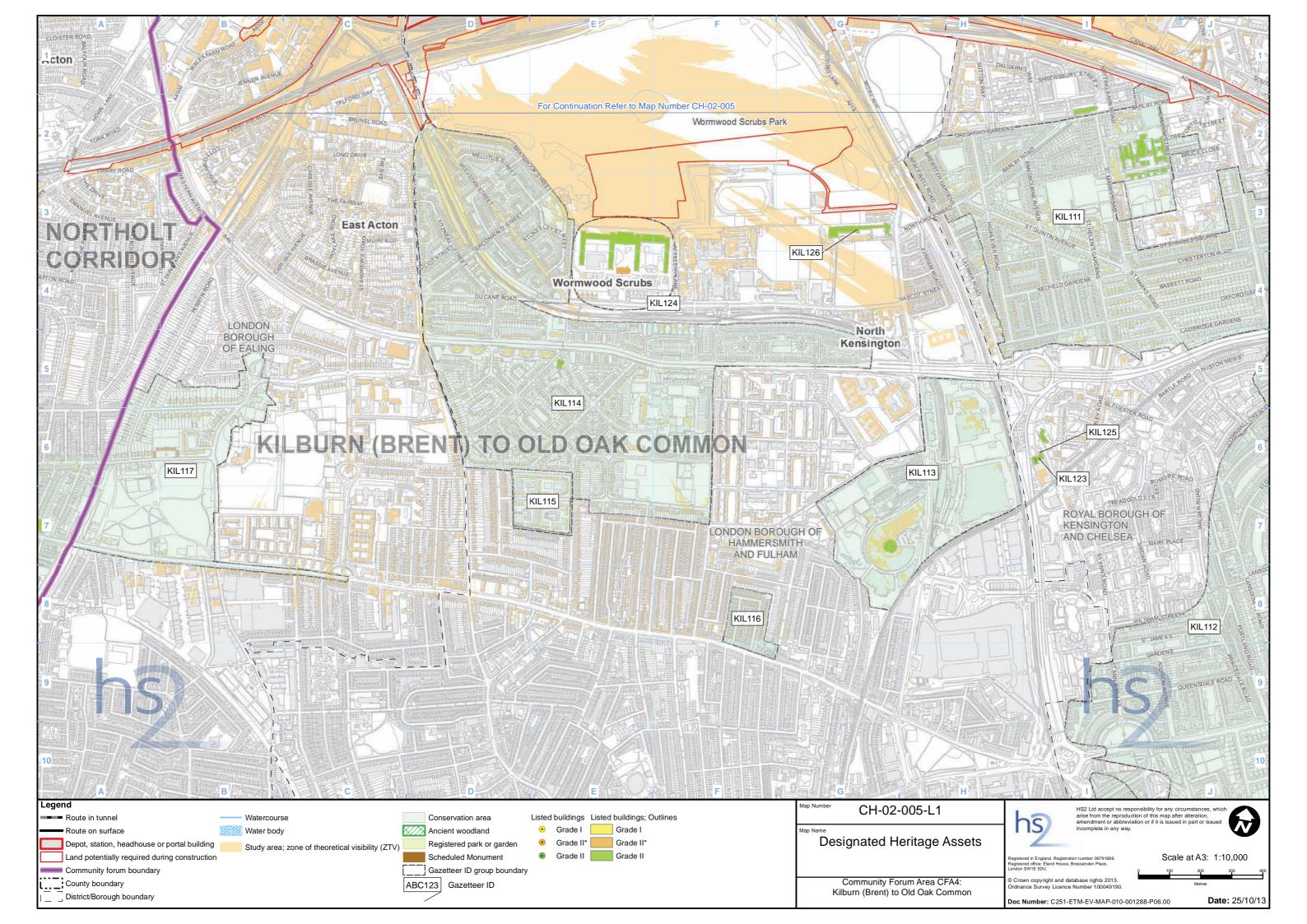
This page is left intentionally blank



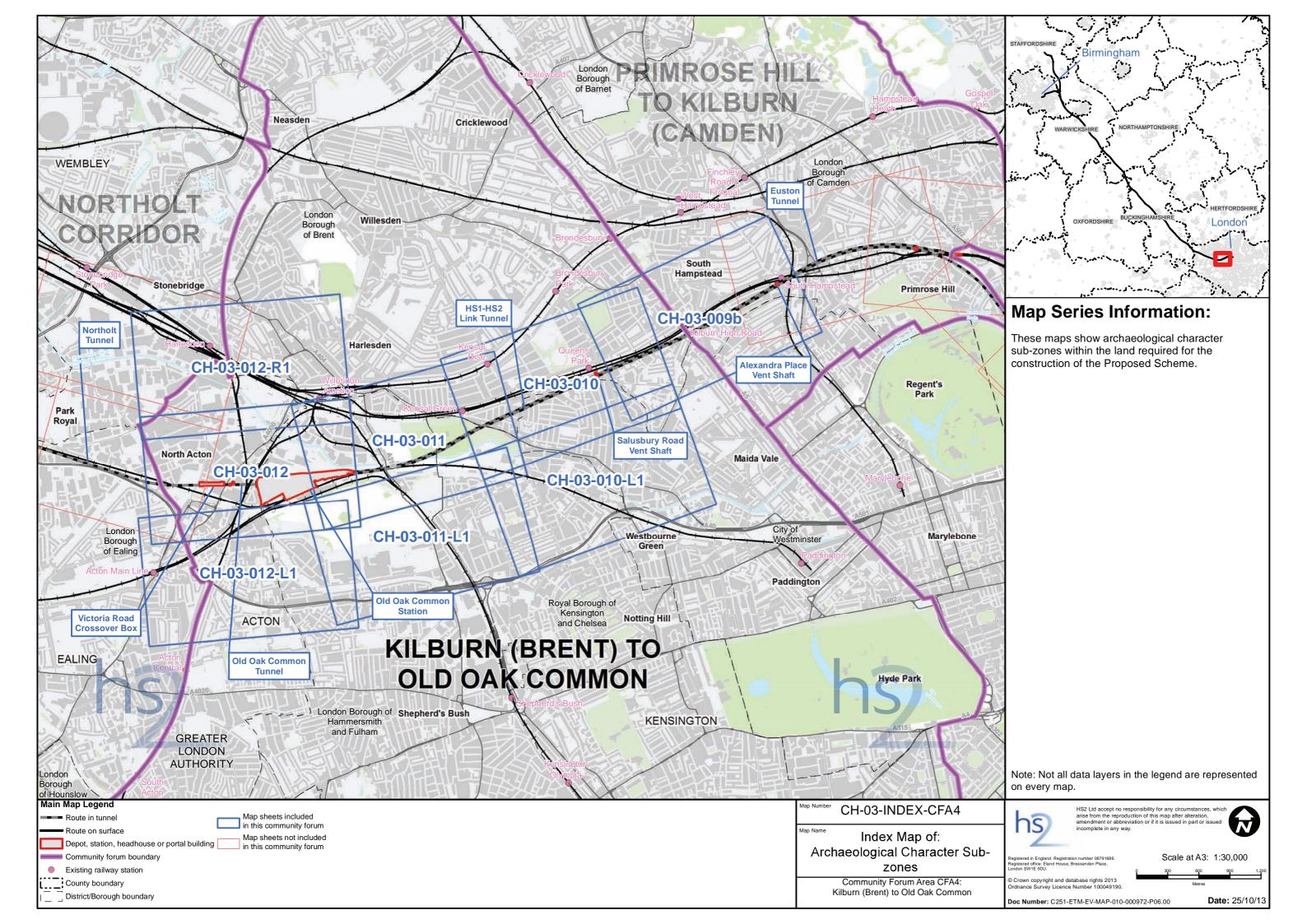


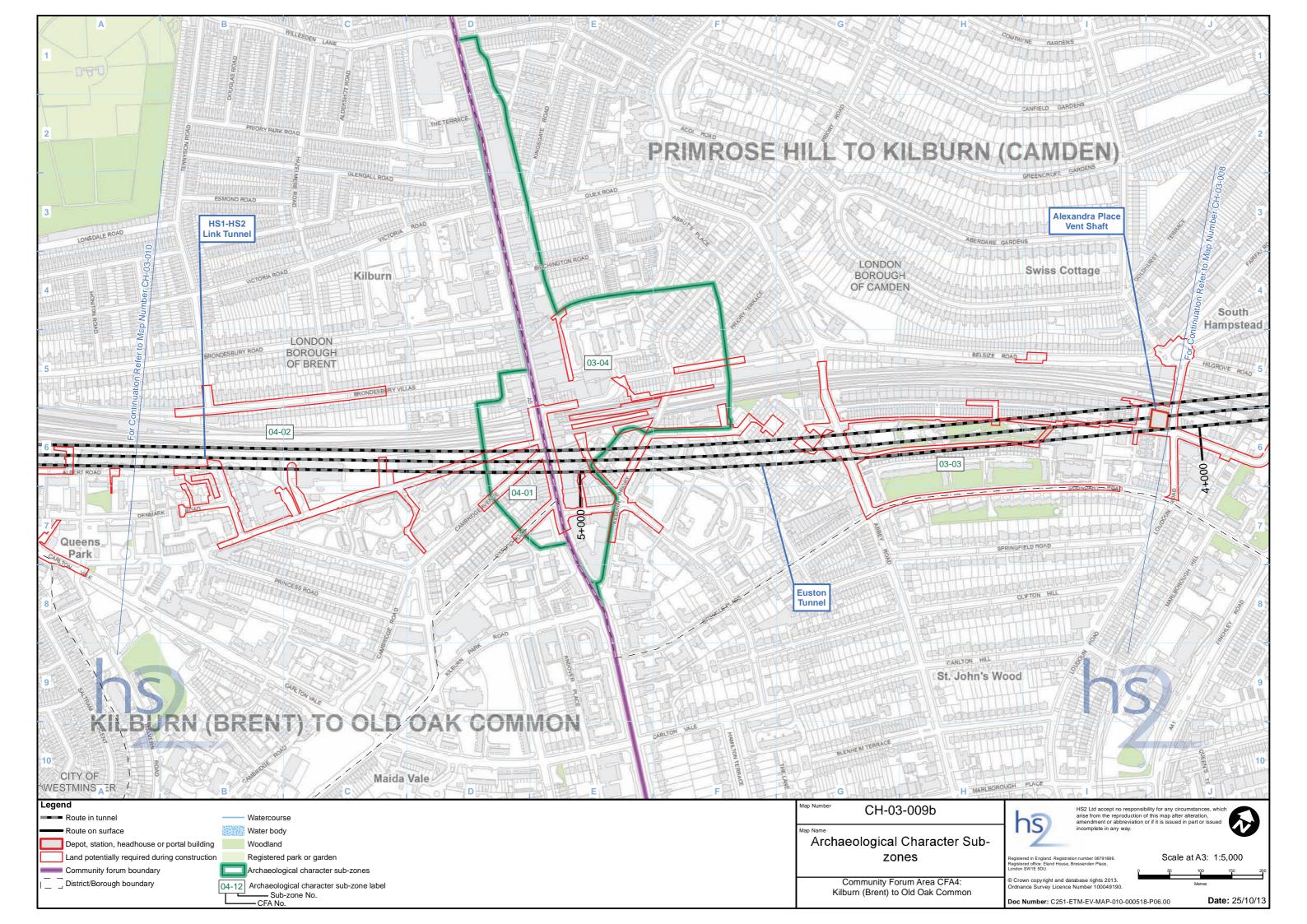


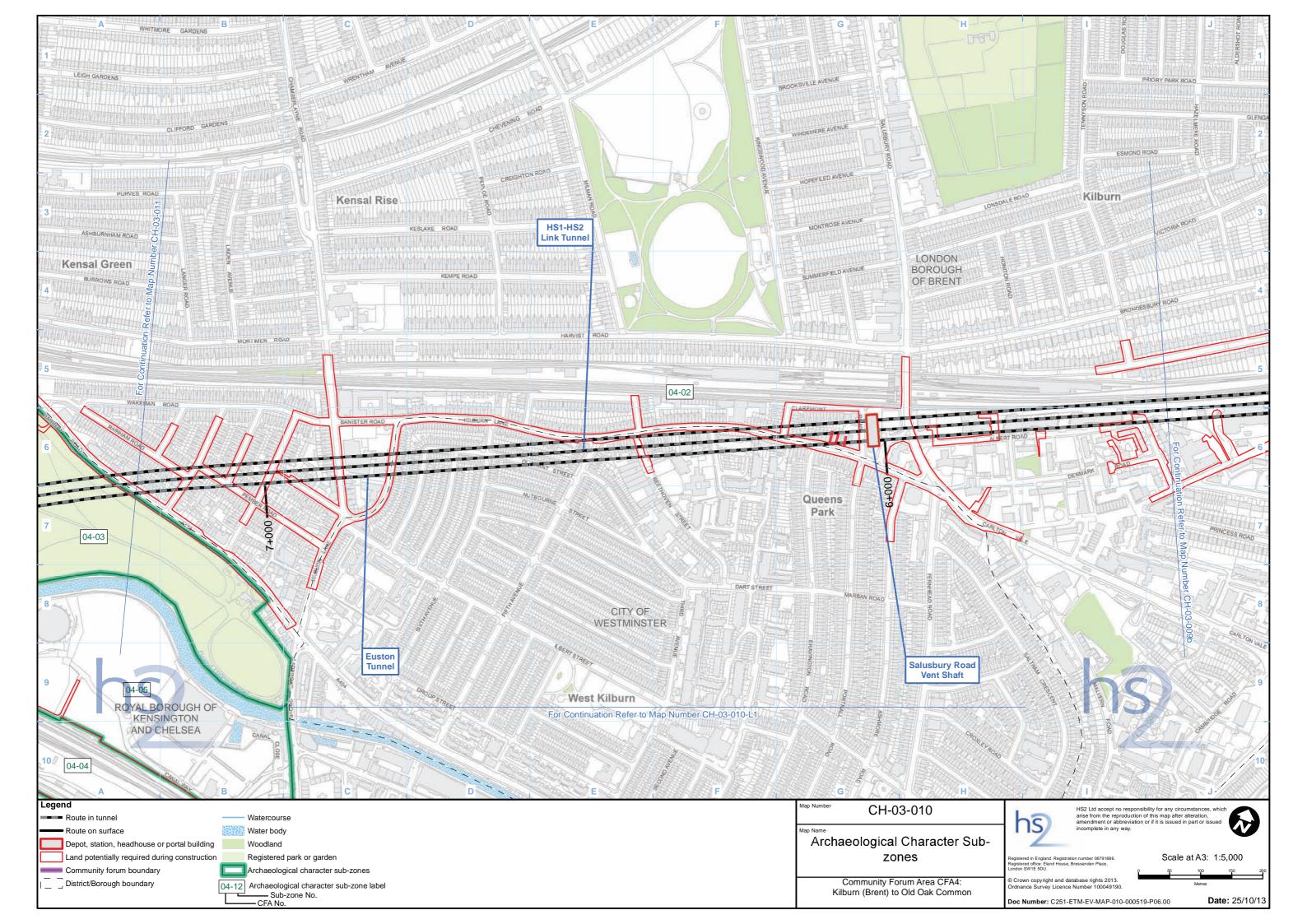


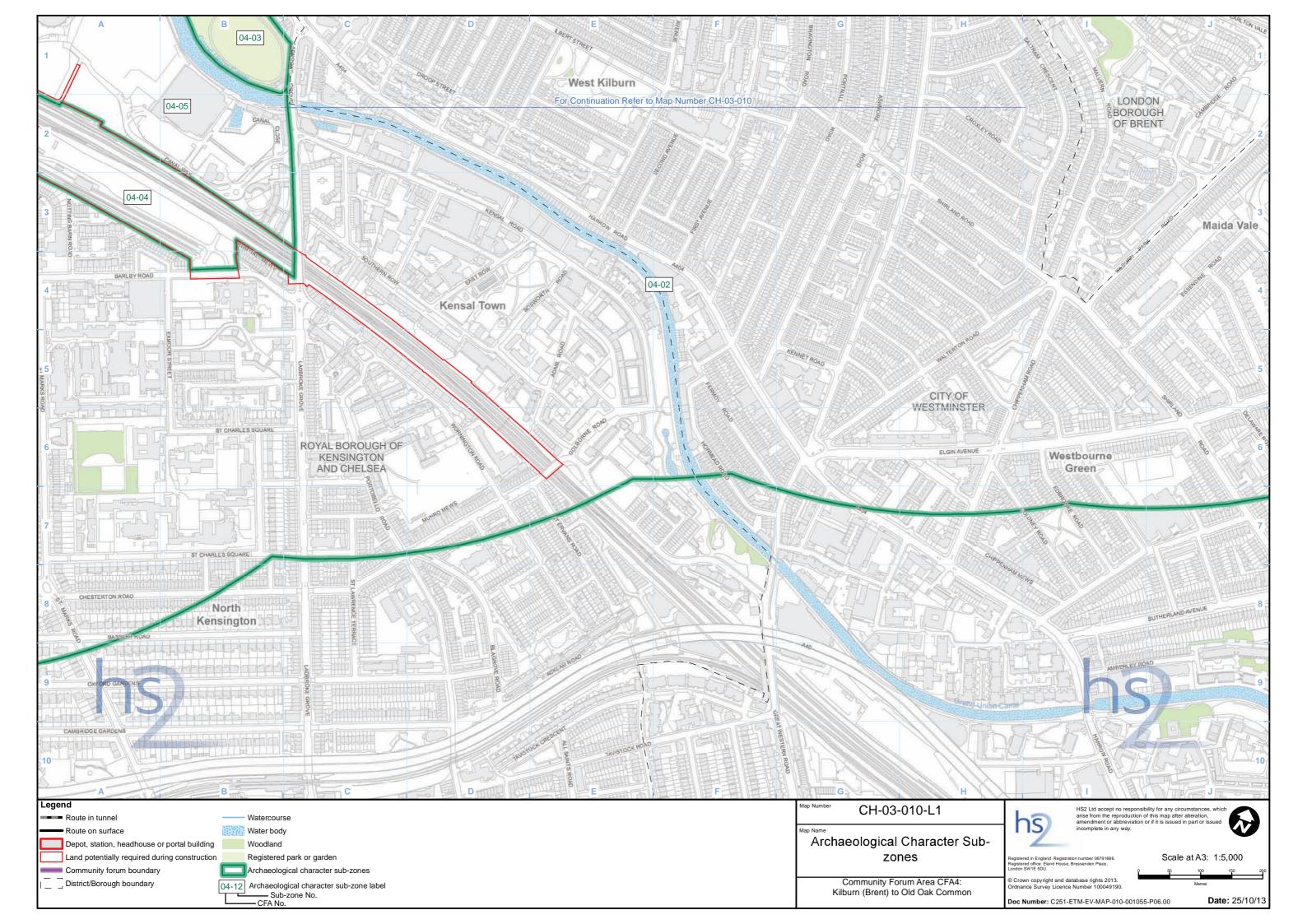


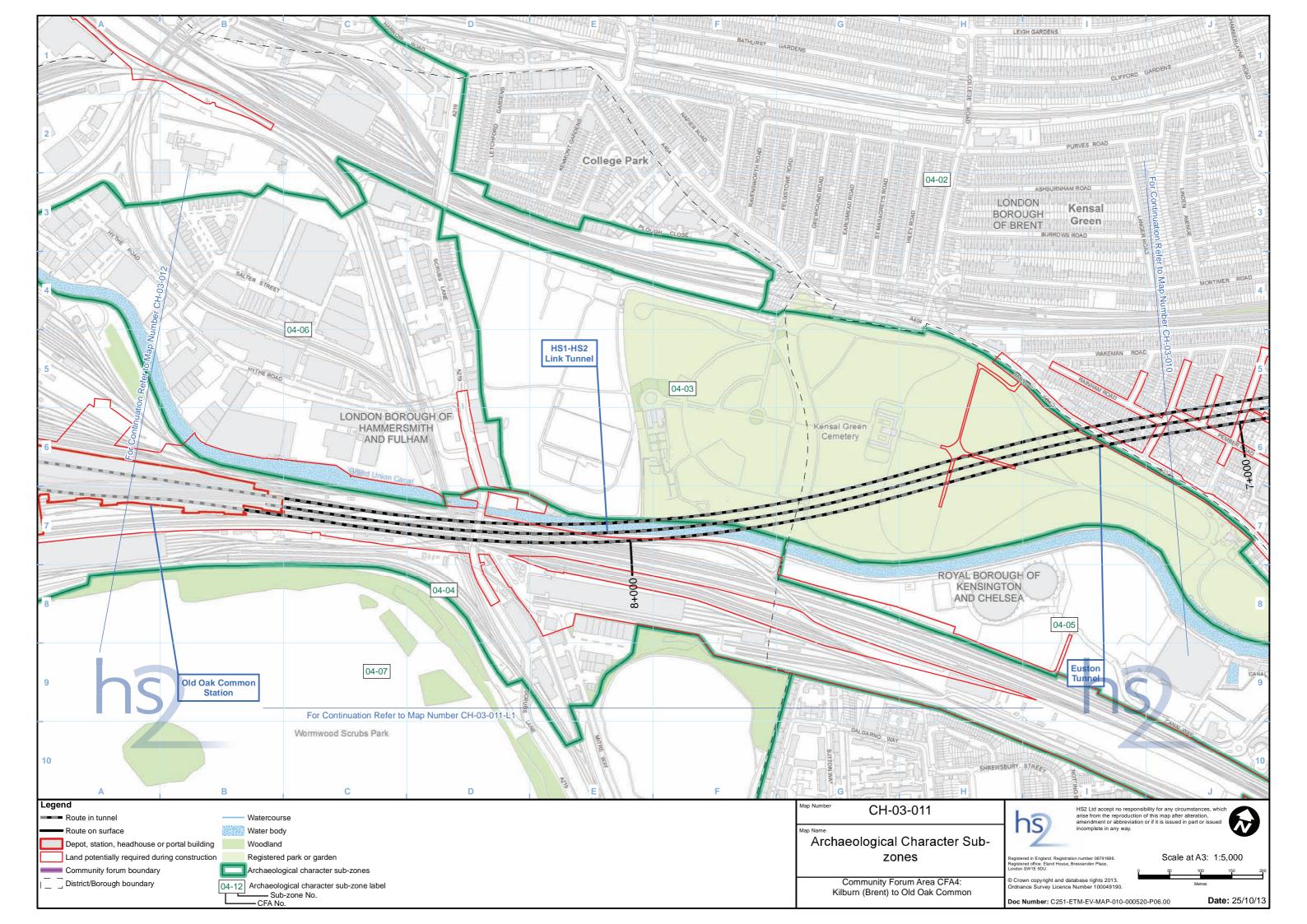
This page is left intentionally blank

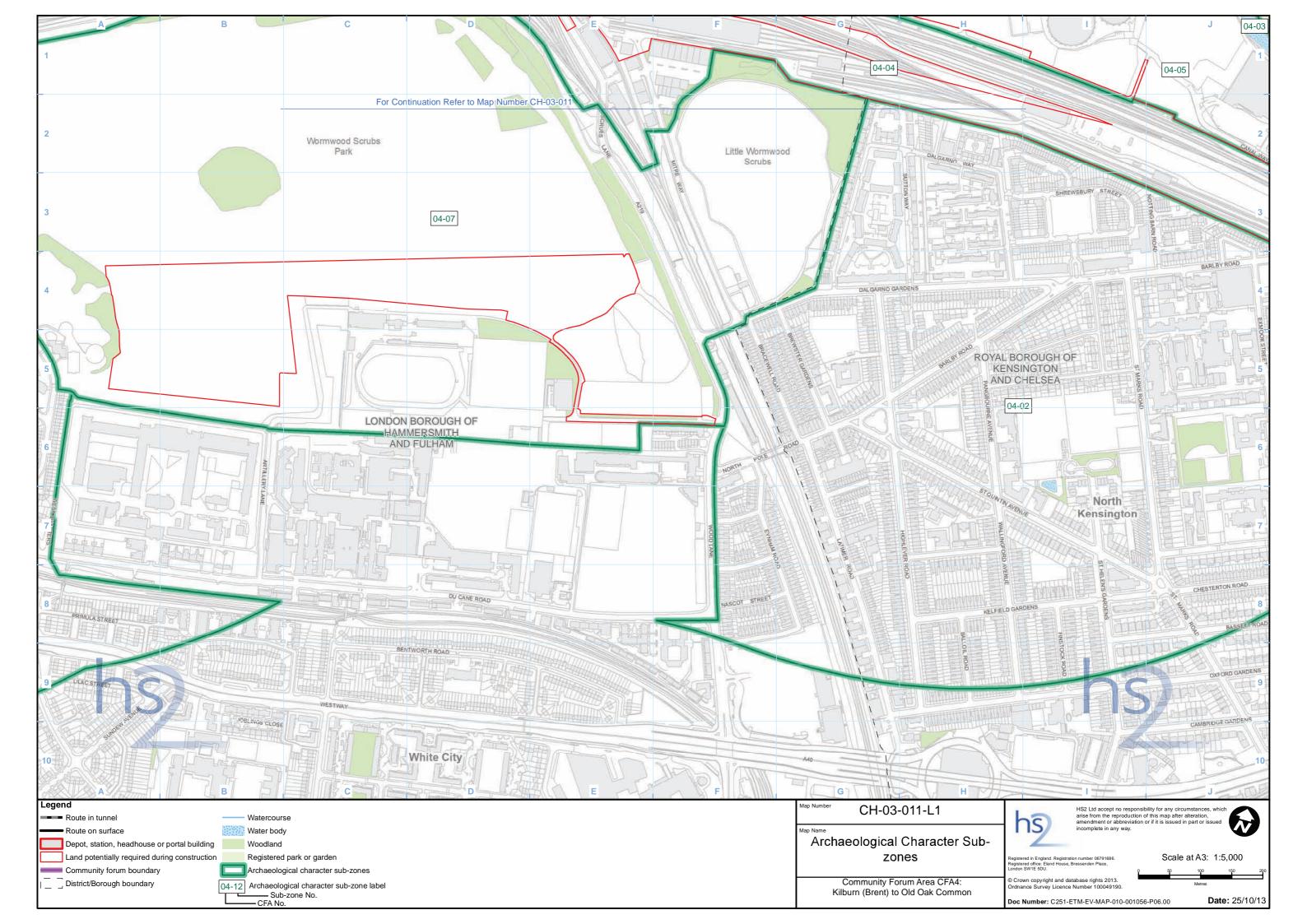


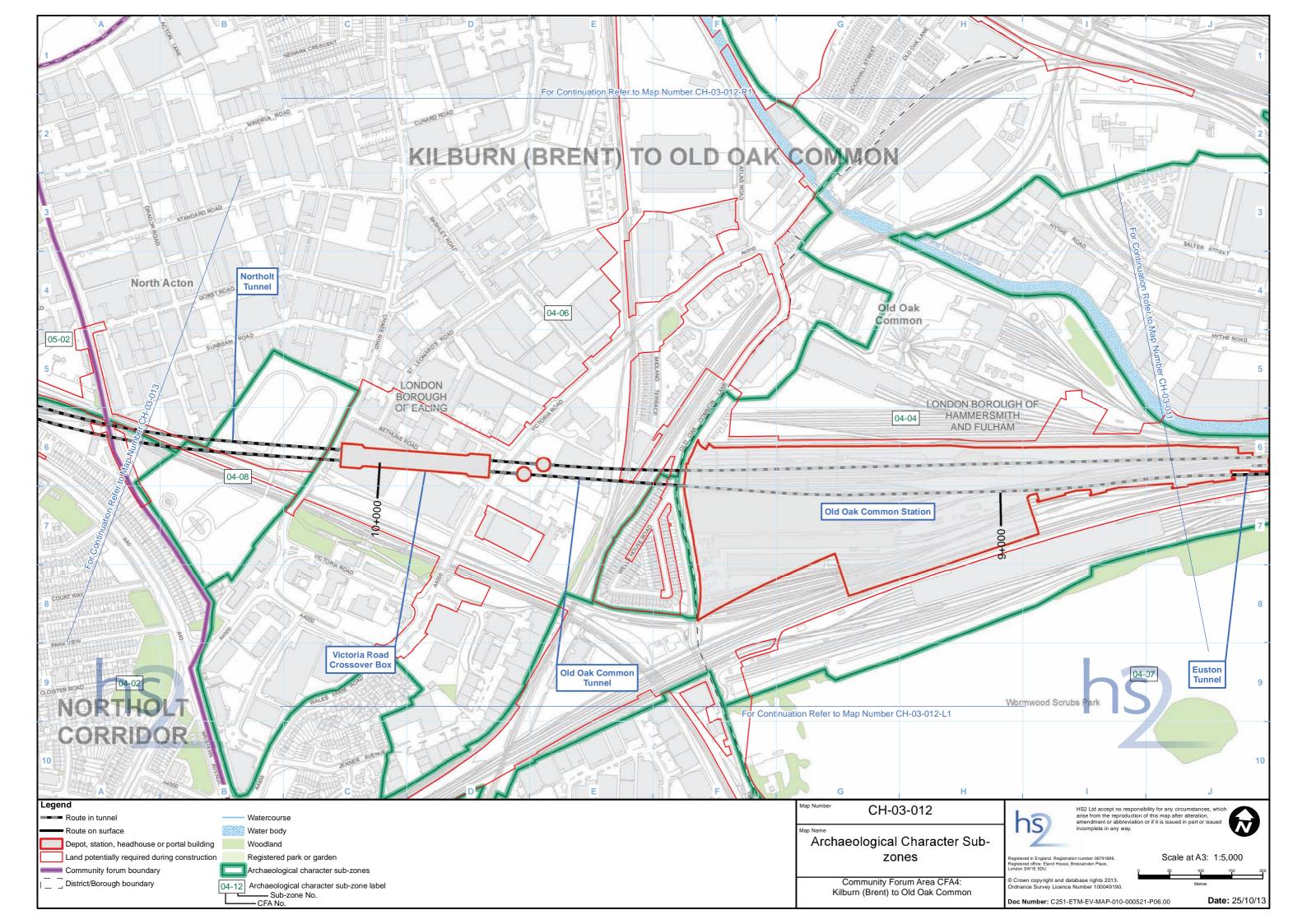


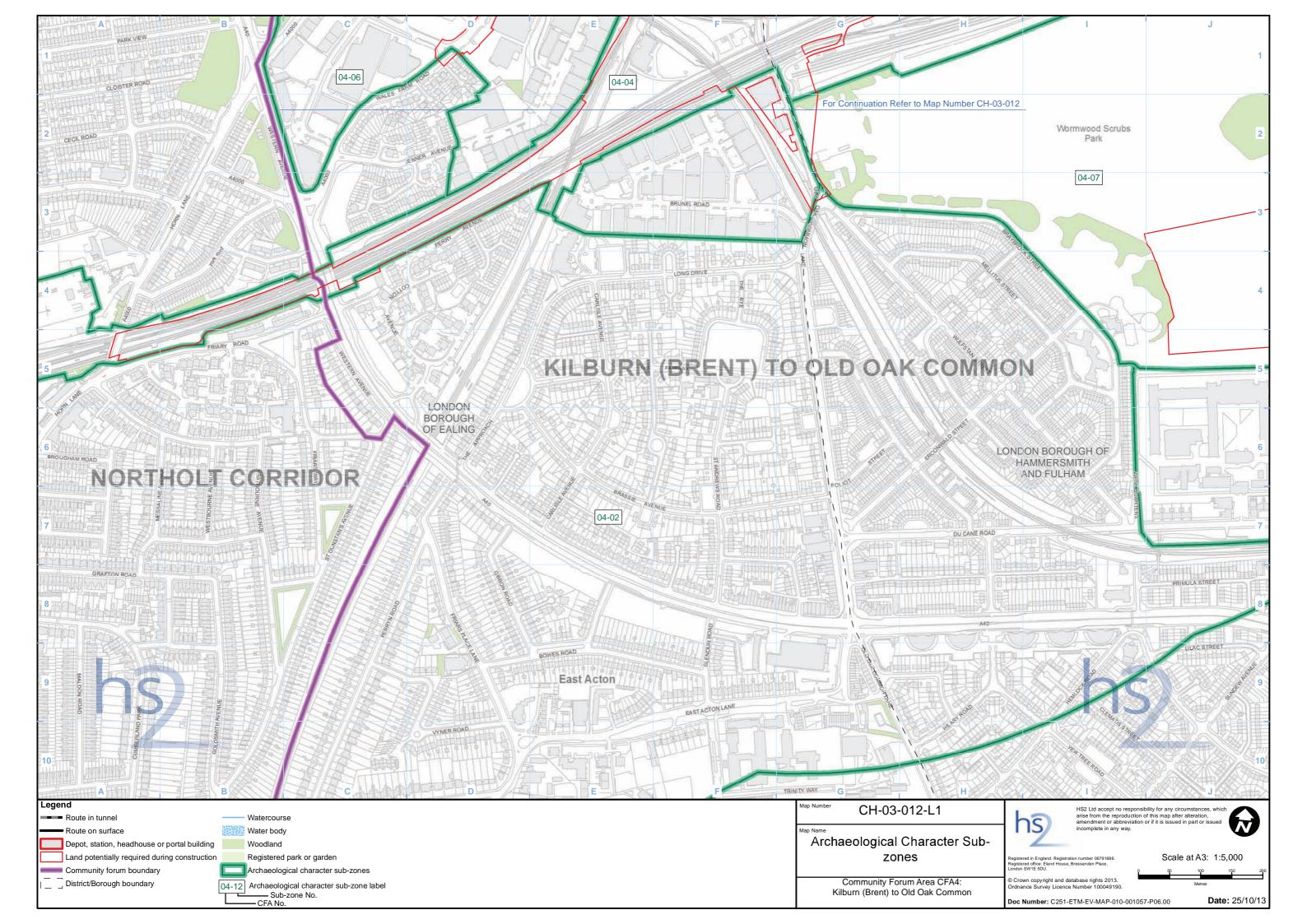


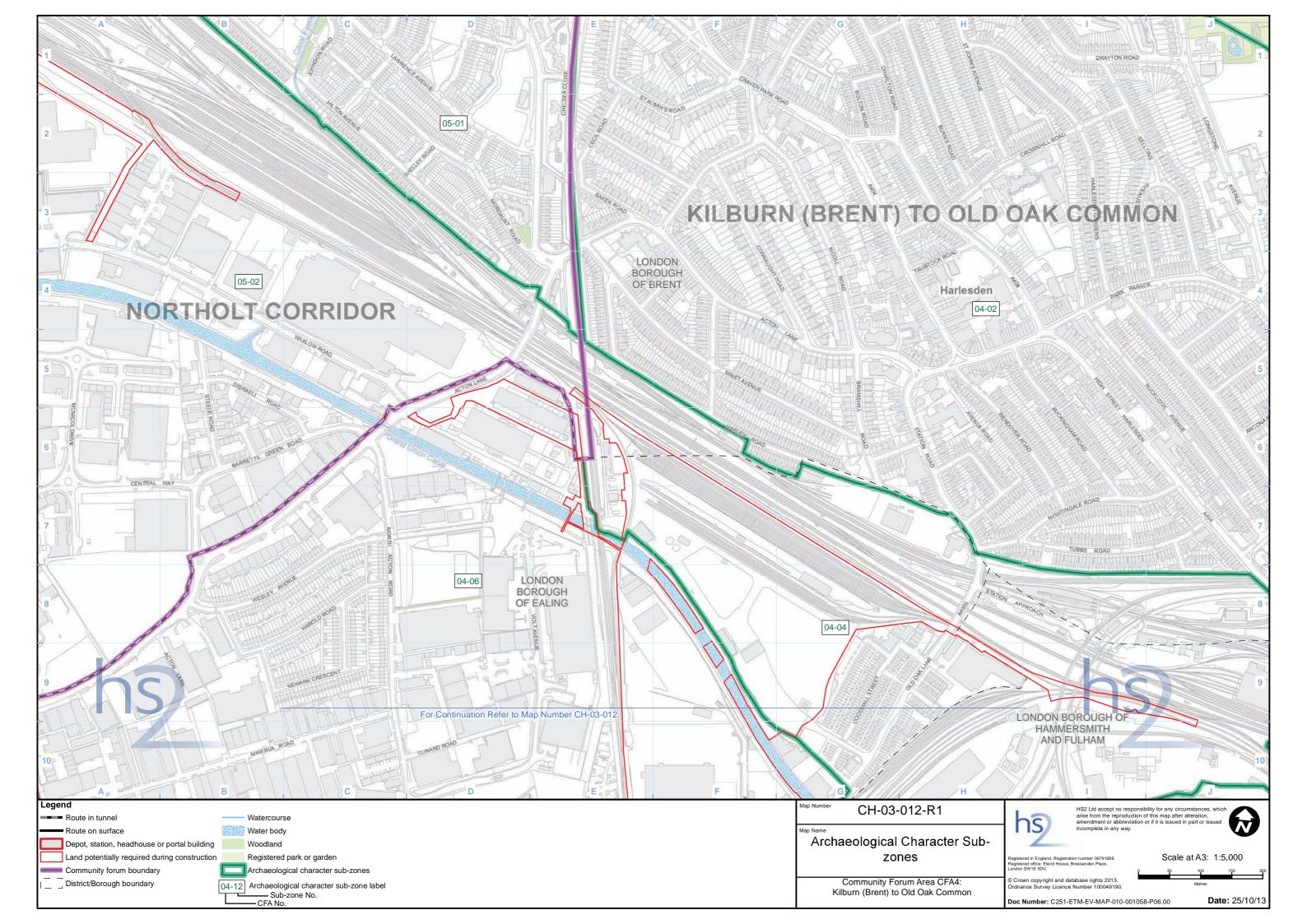














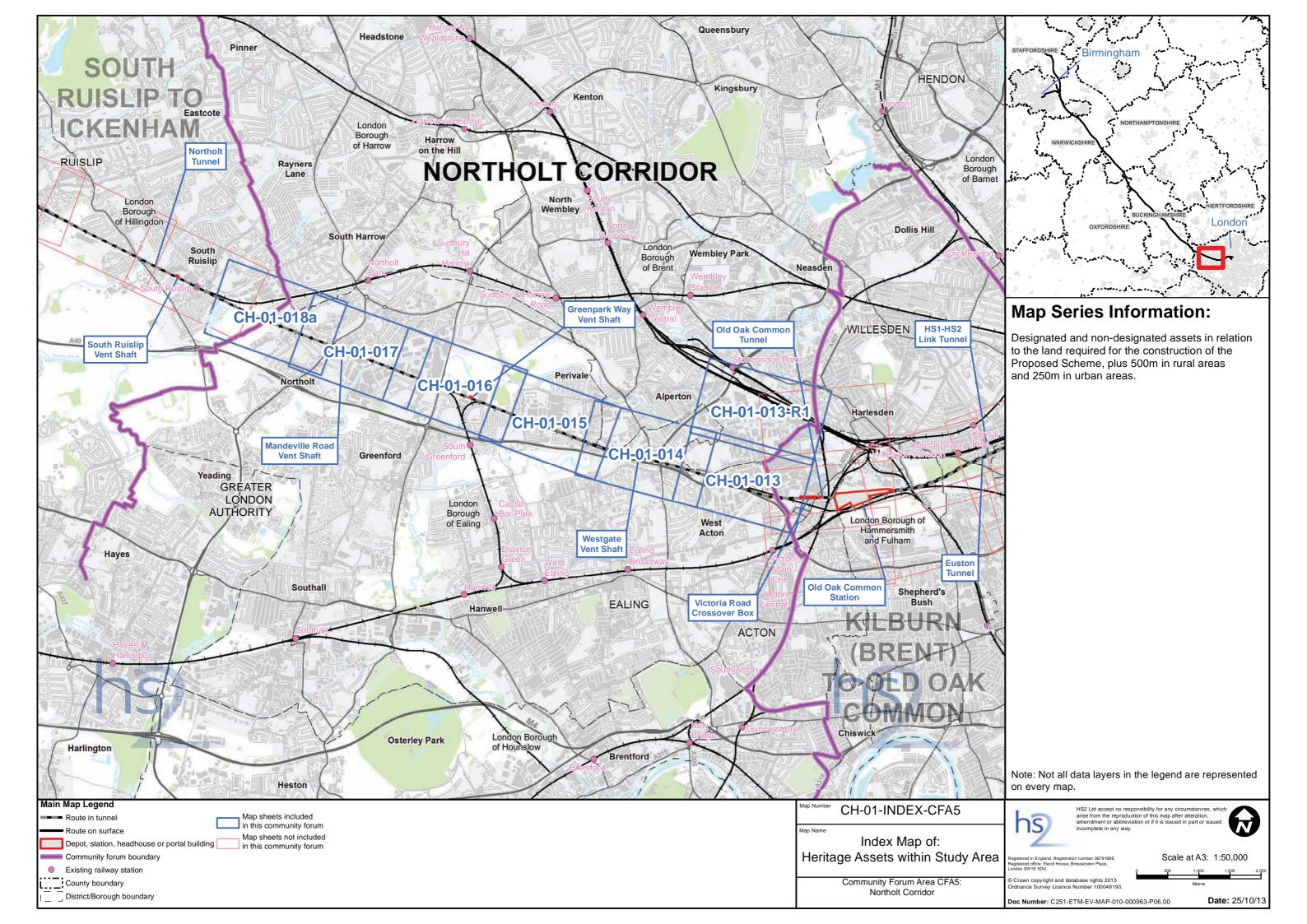
LONDON-WEST MIDLANDS ENVIRONMENTAL STATEMENT

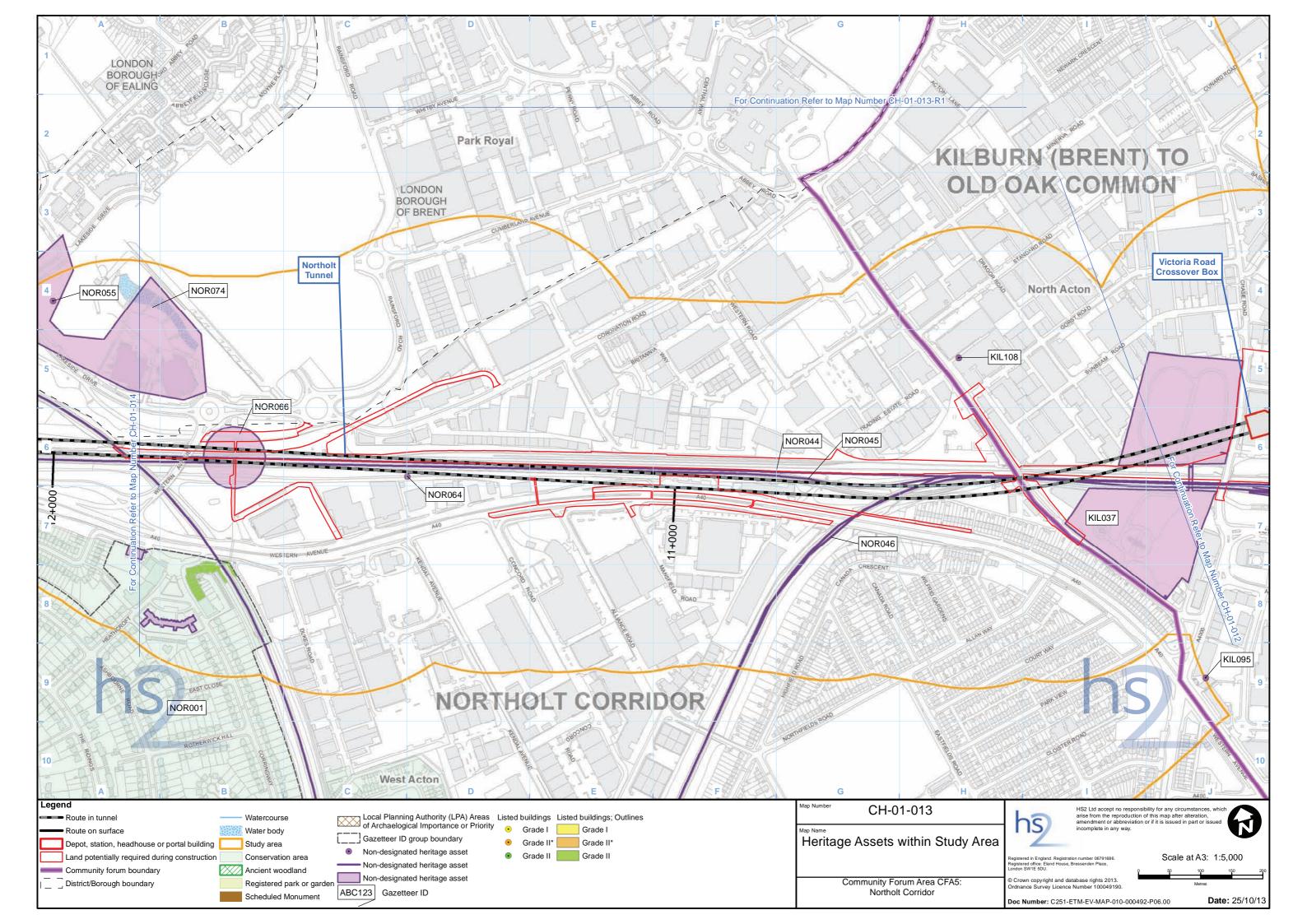
CFA5 | Northolt Corridor

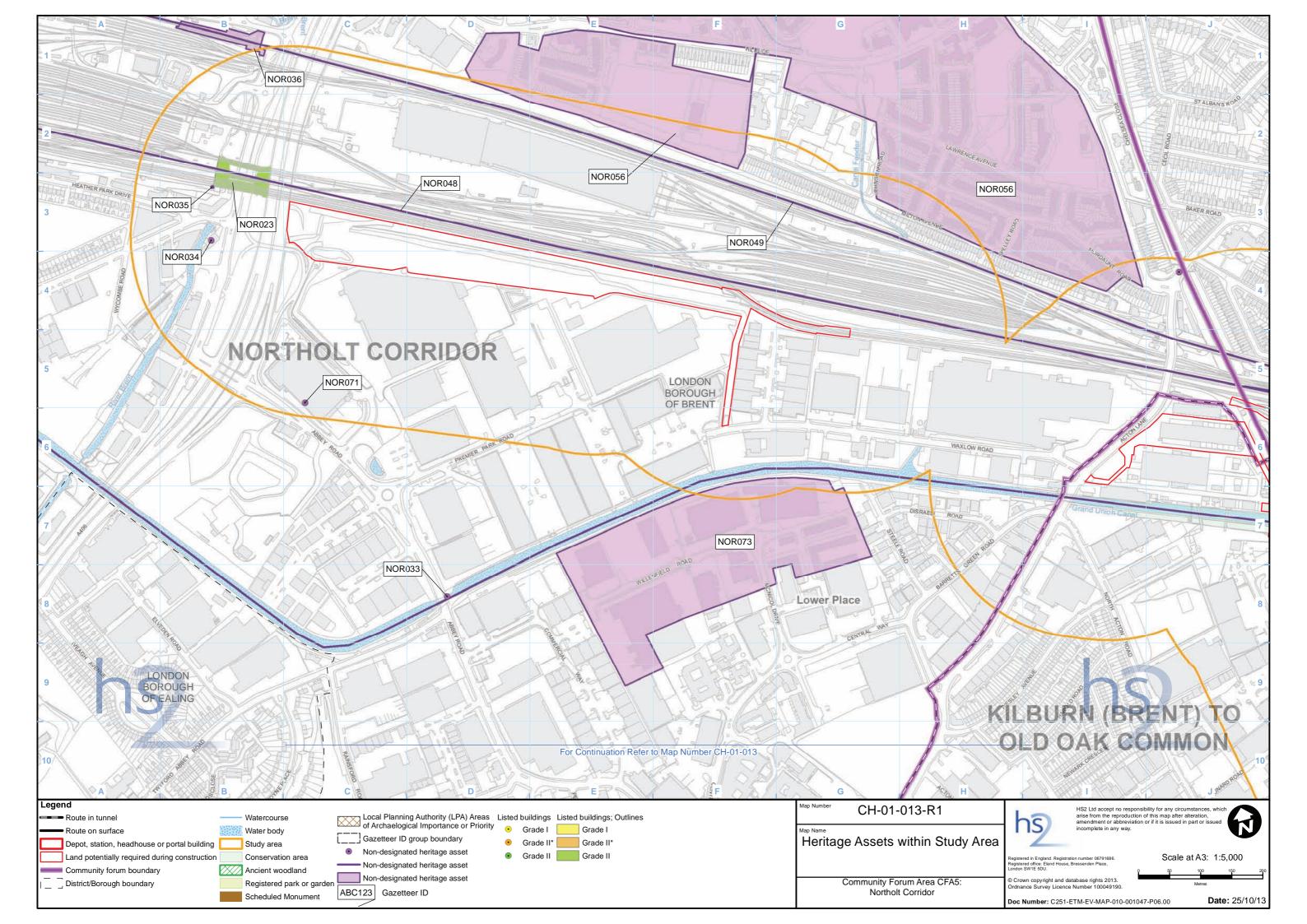
CH-o1 - Heritage Assets within Study Area

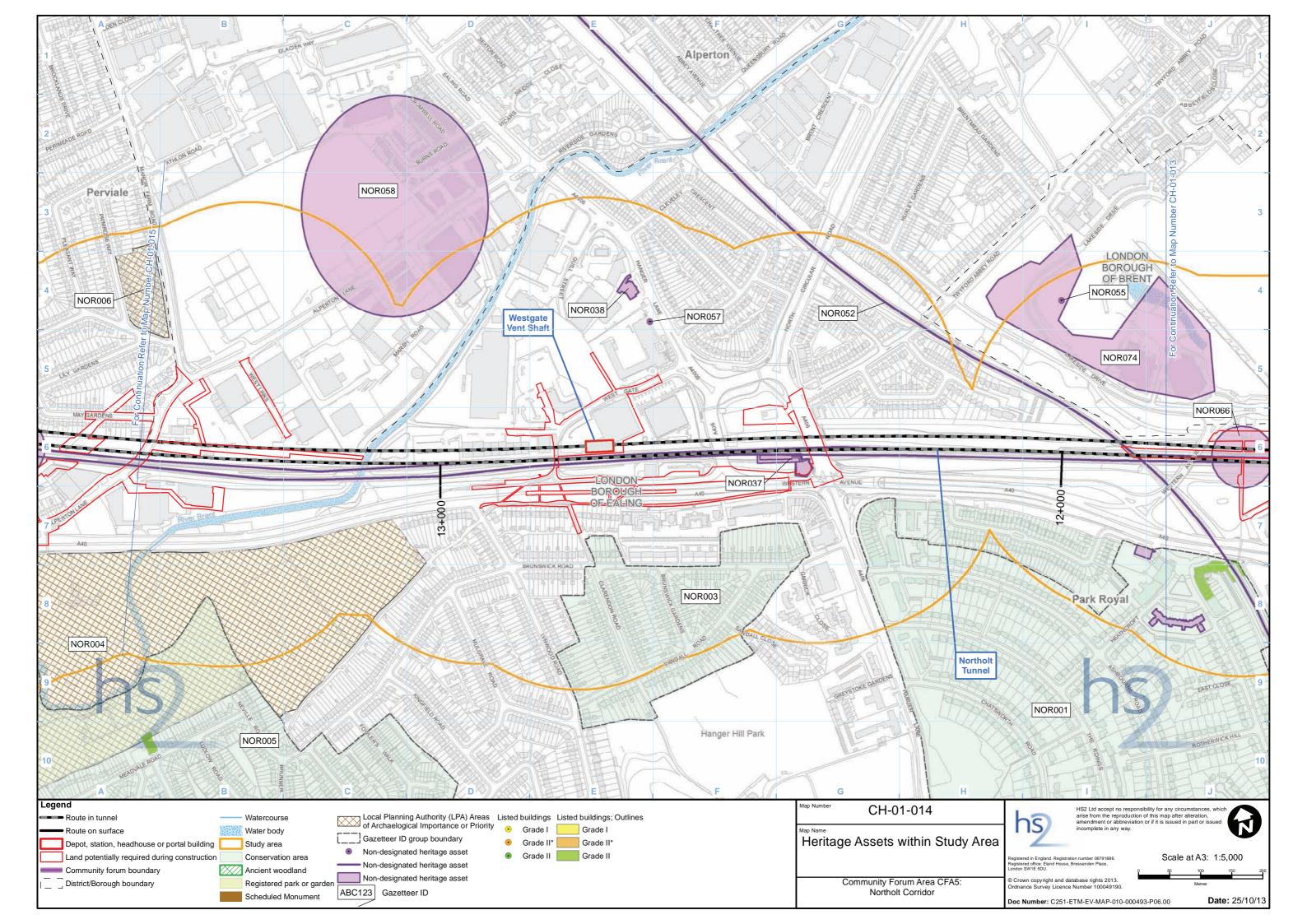
CH-o2 - Designated Heritage Assets

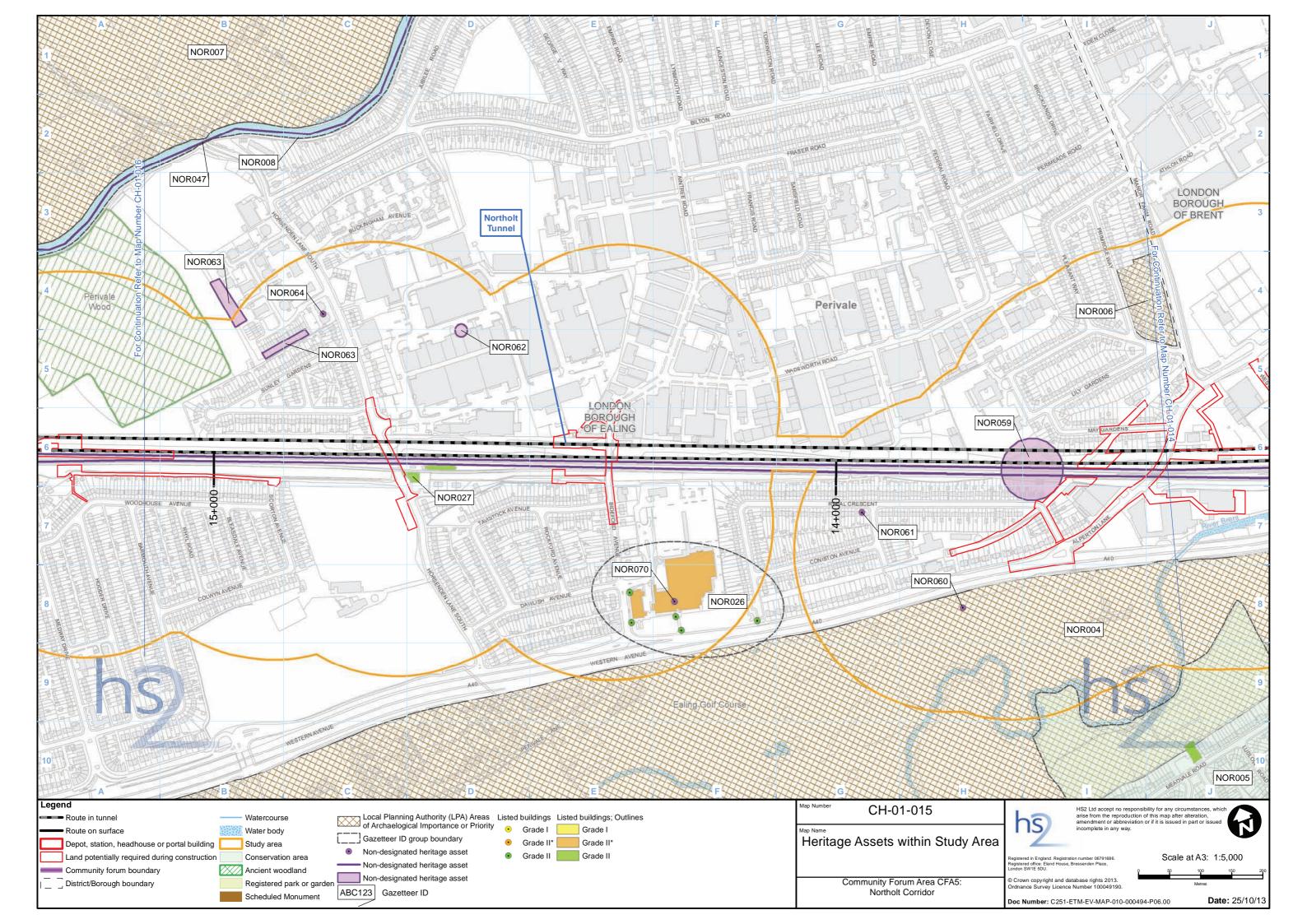
CH-o3 - Archaeological Character Sub-zones

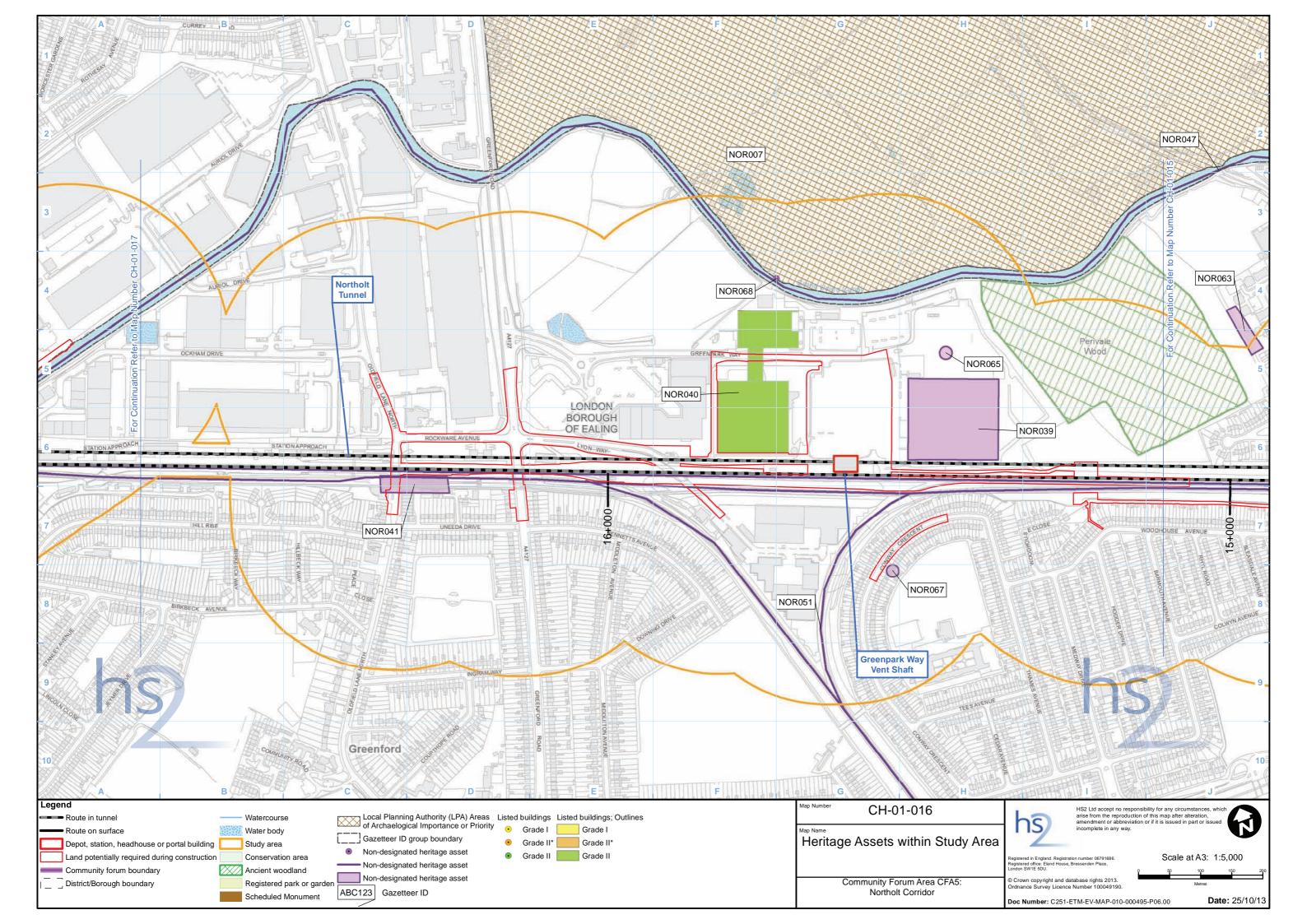


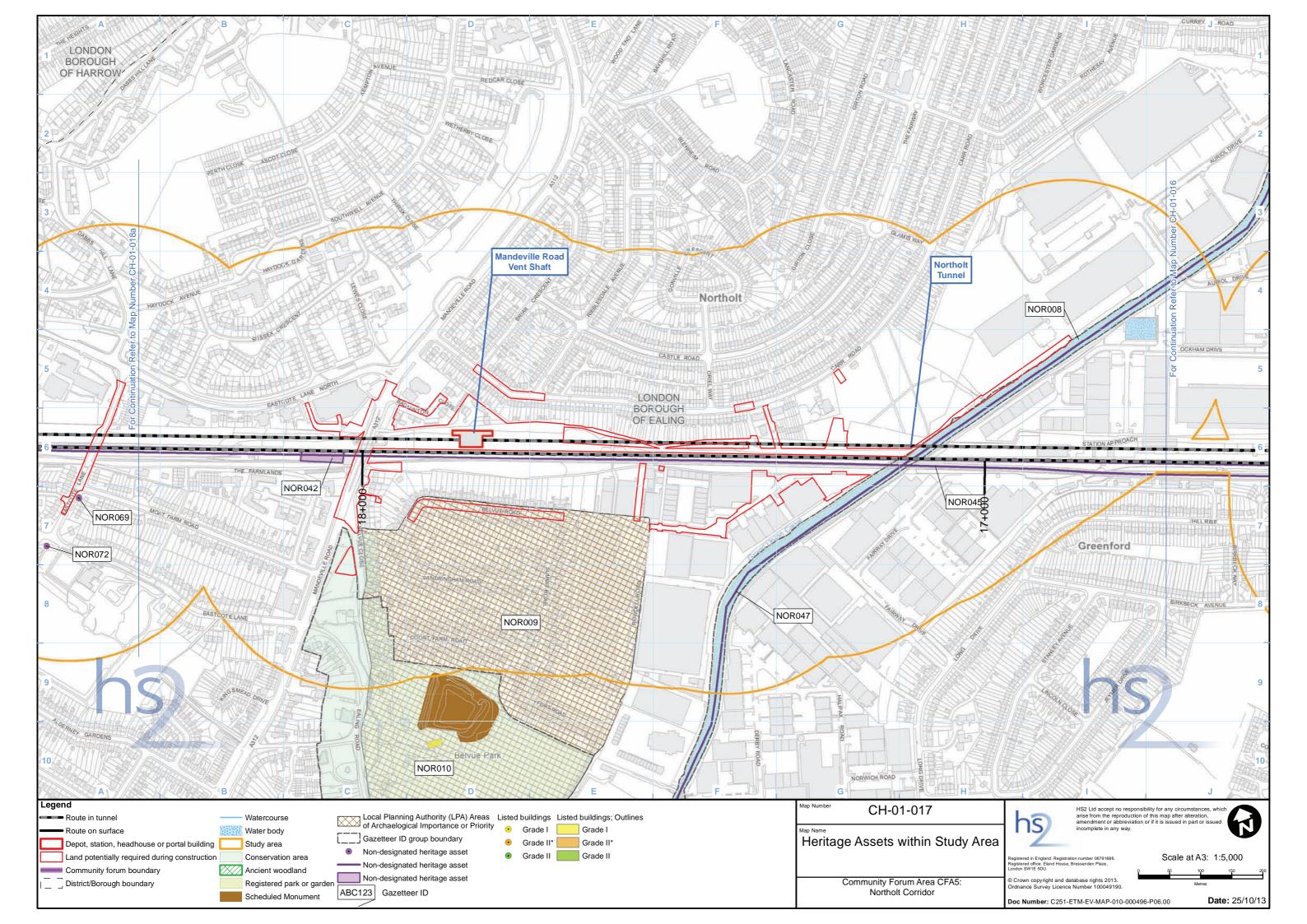


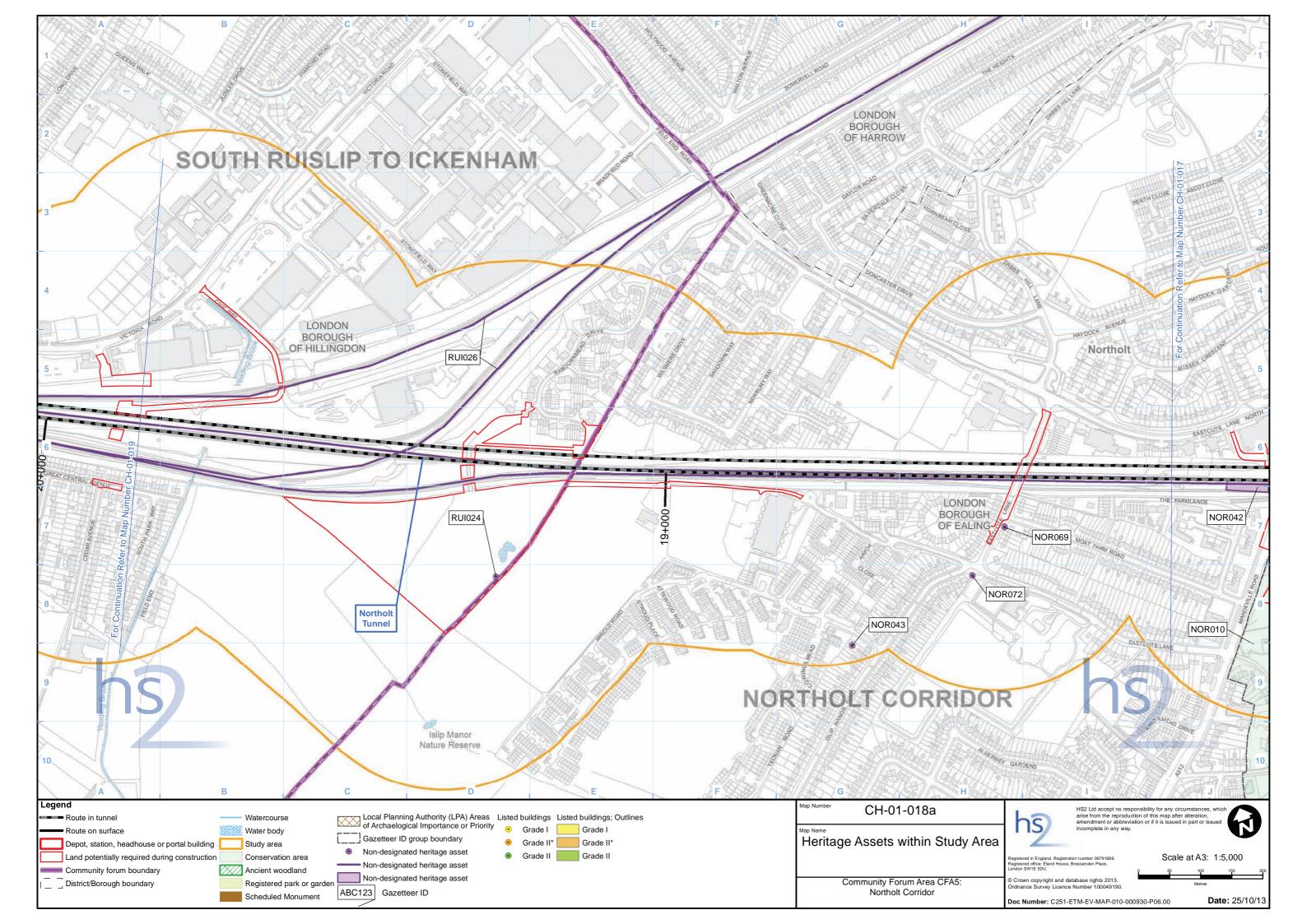


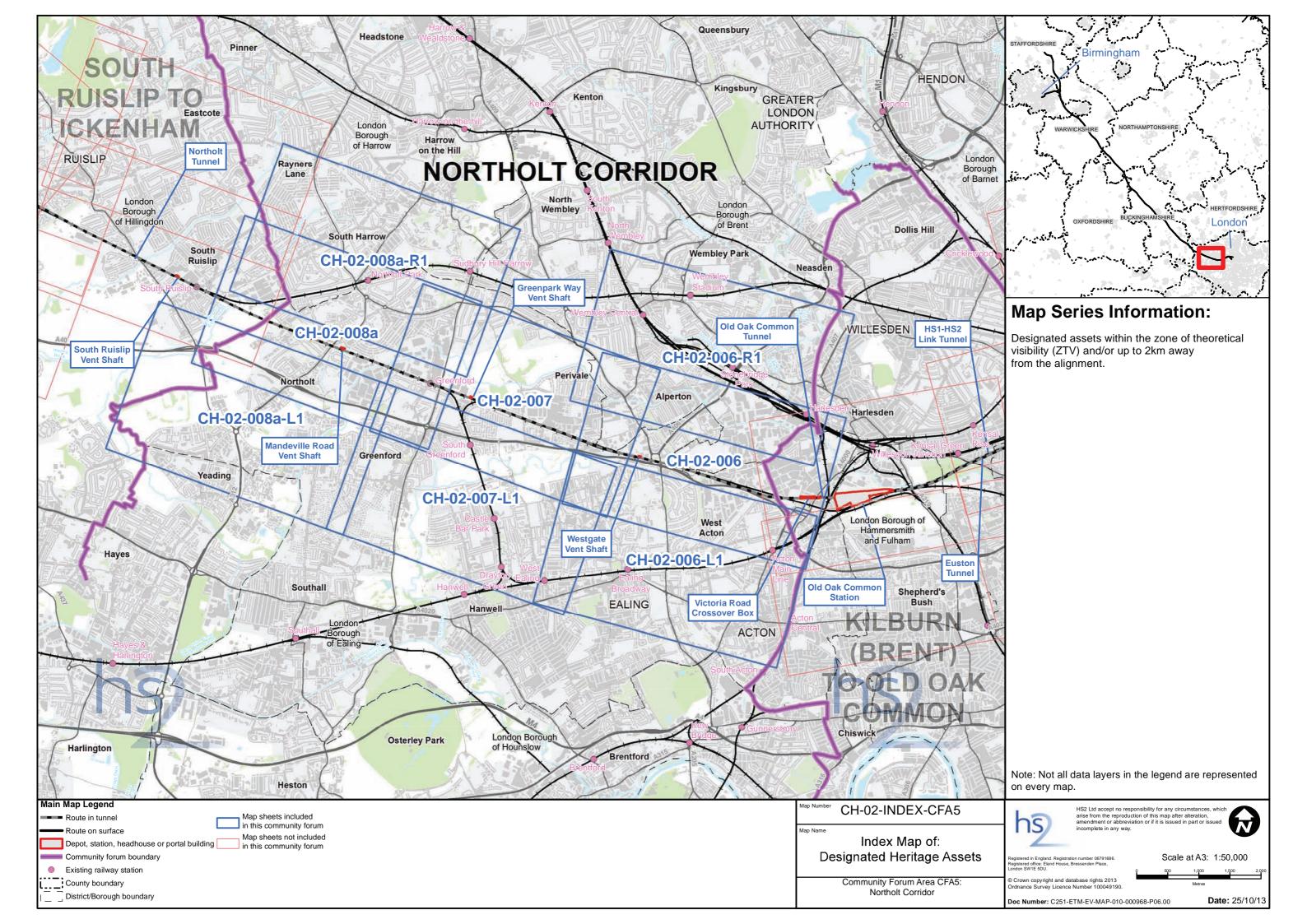


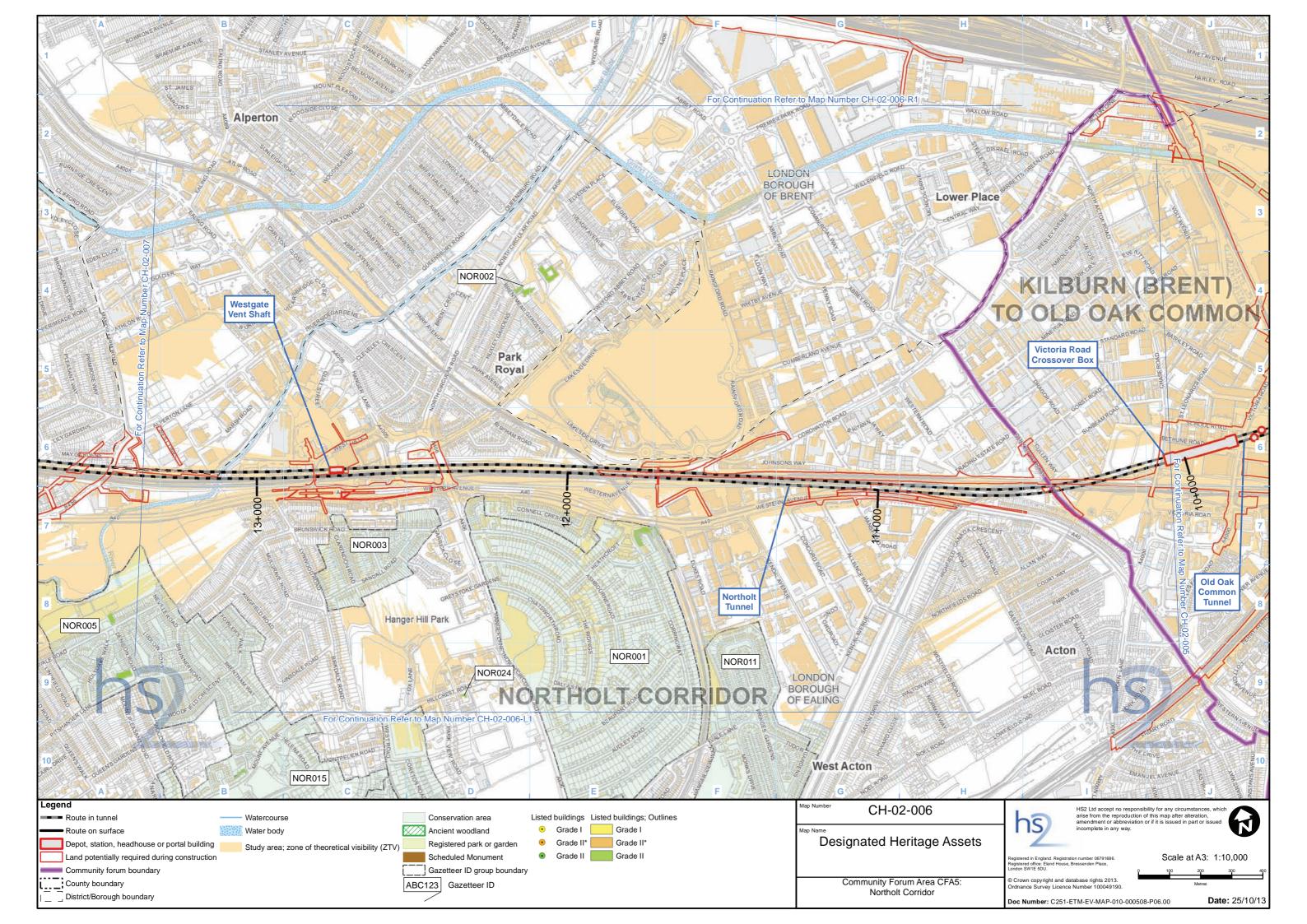


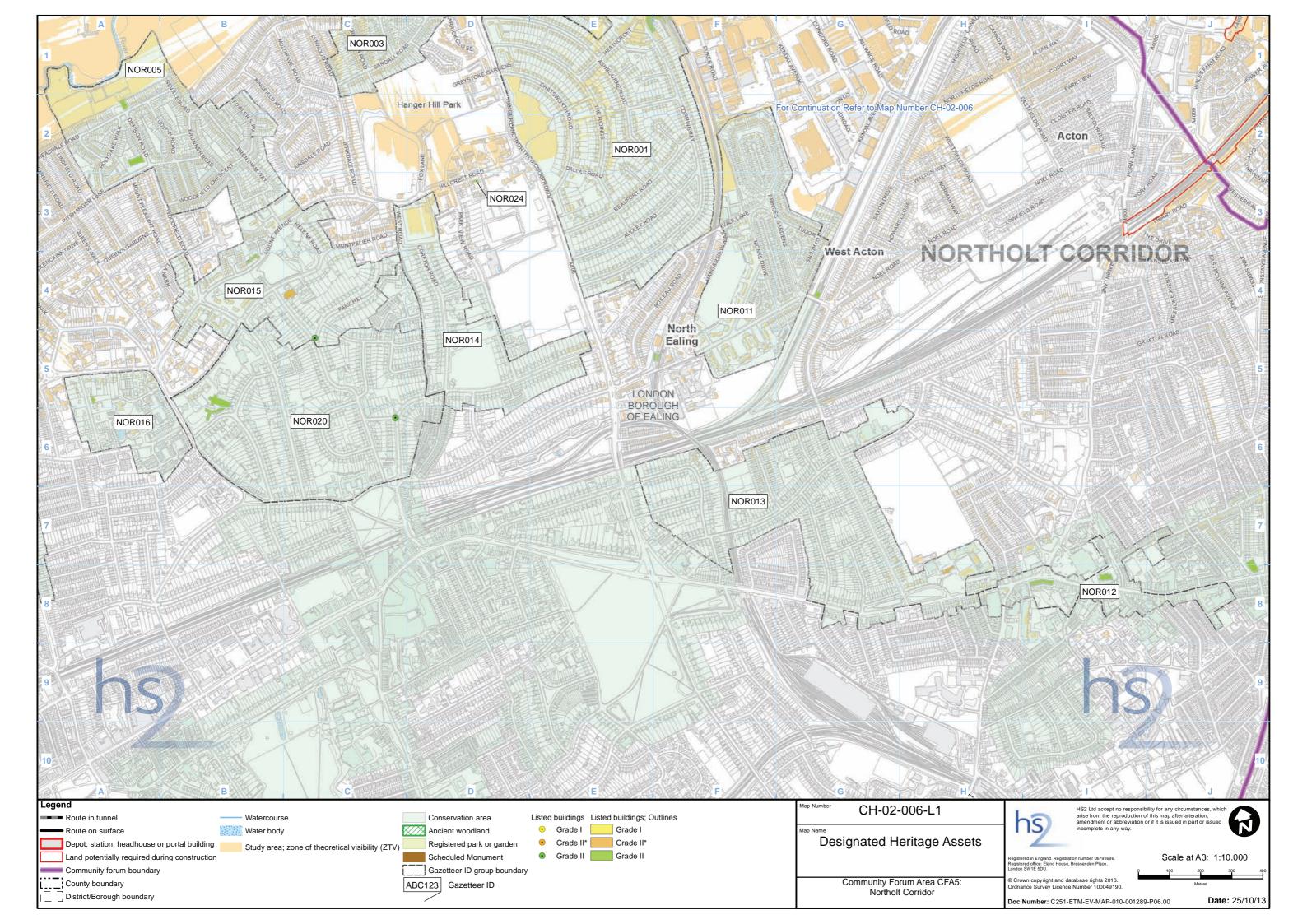


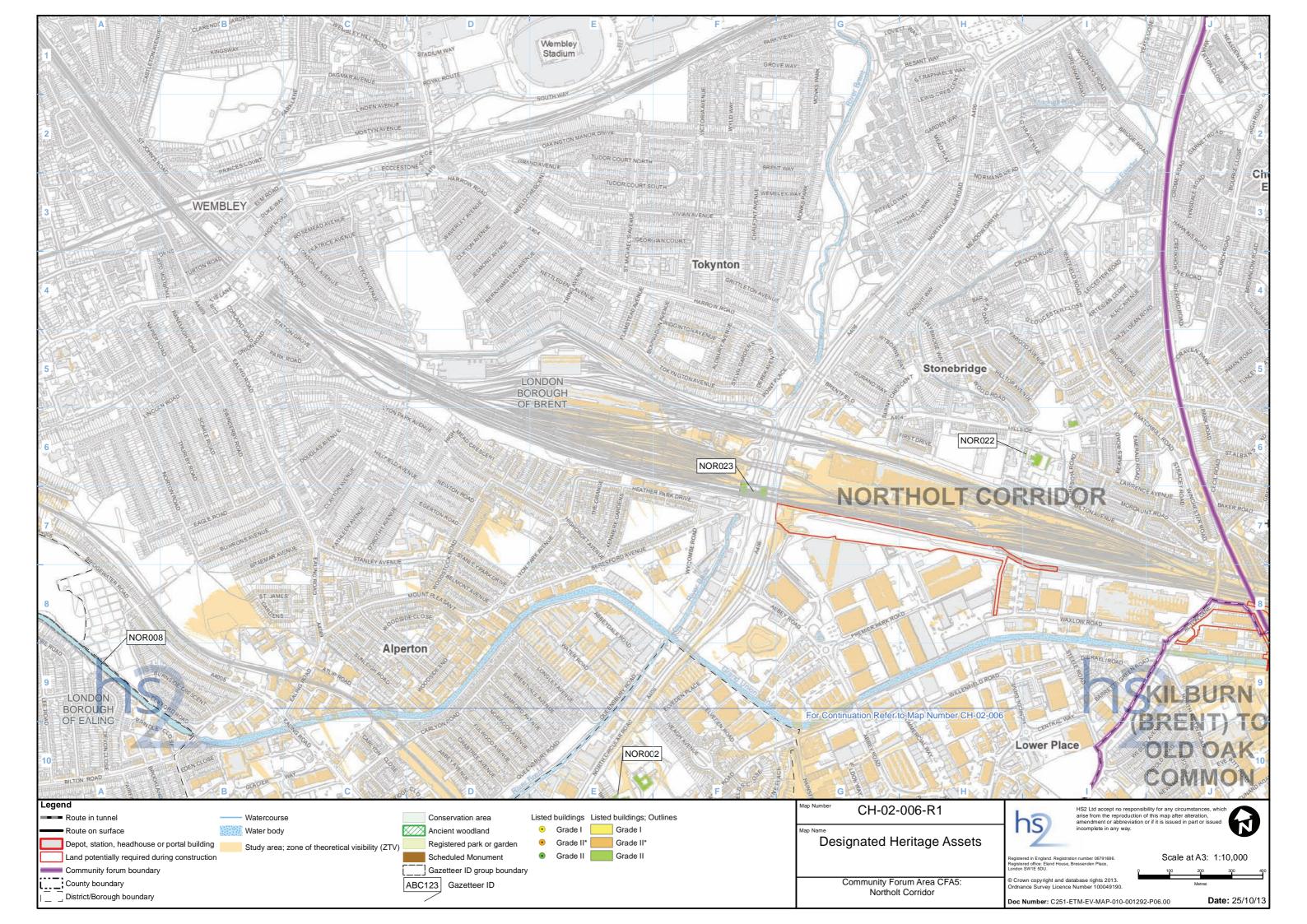


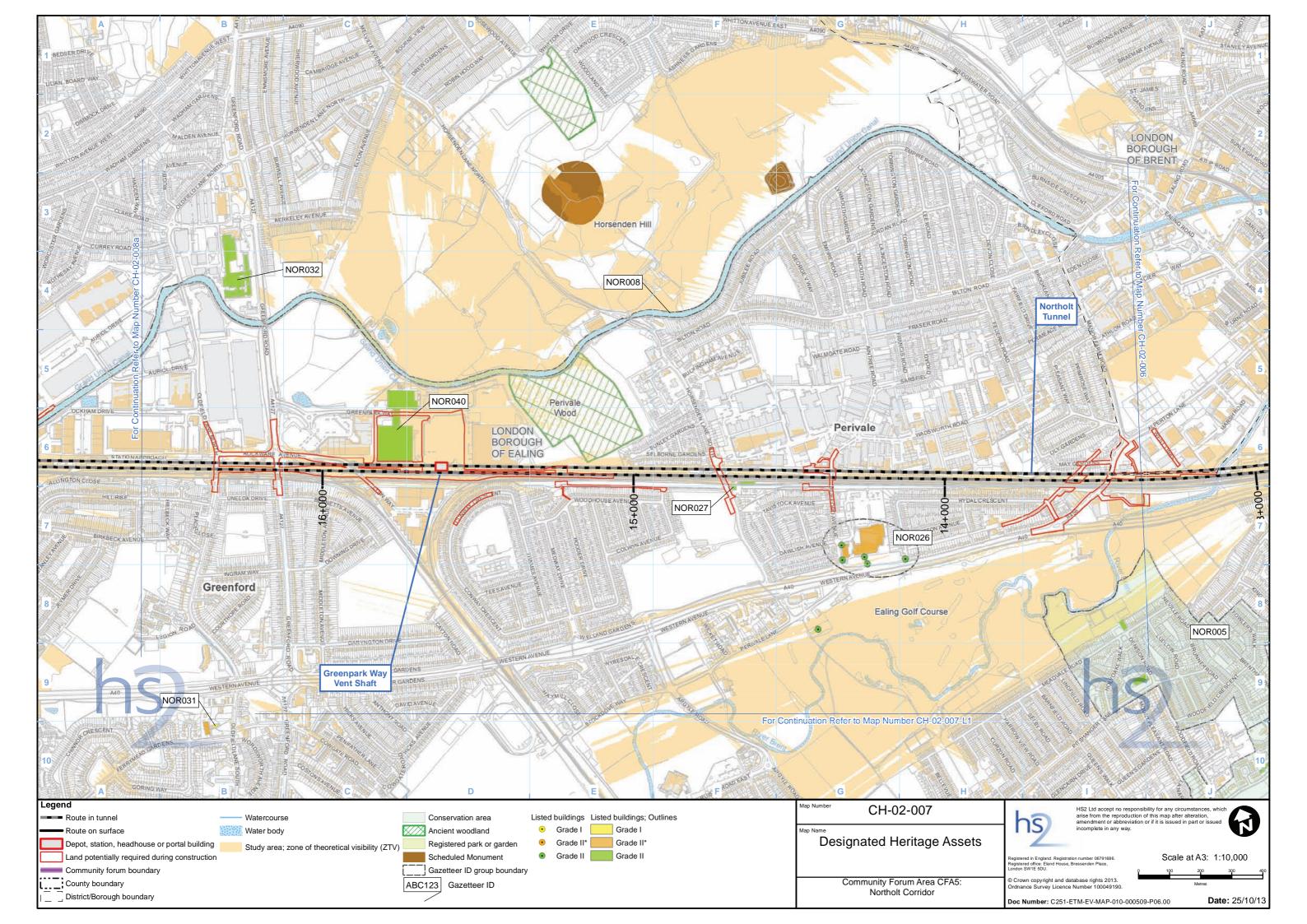


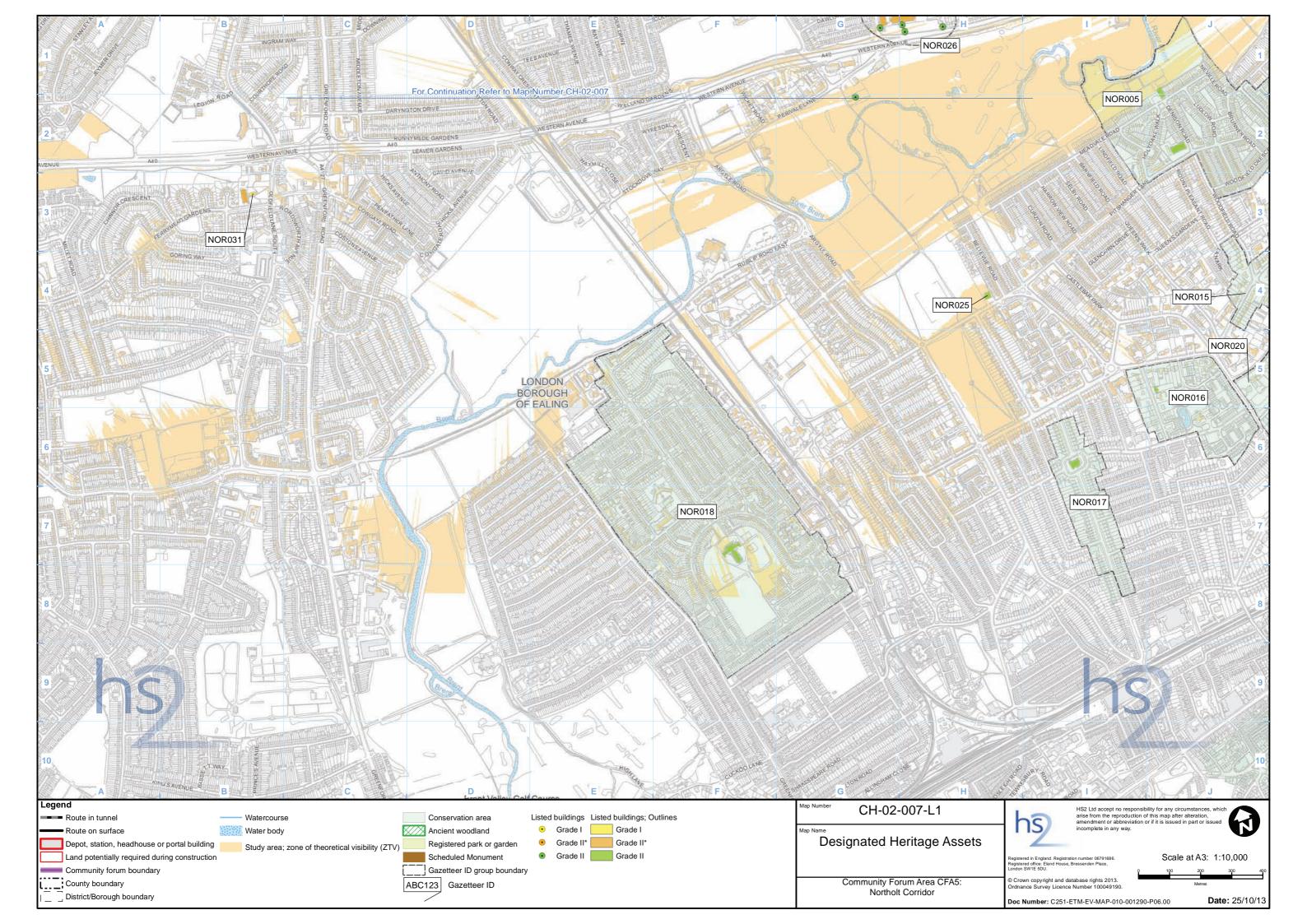


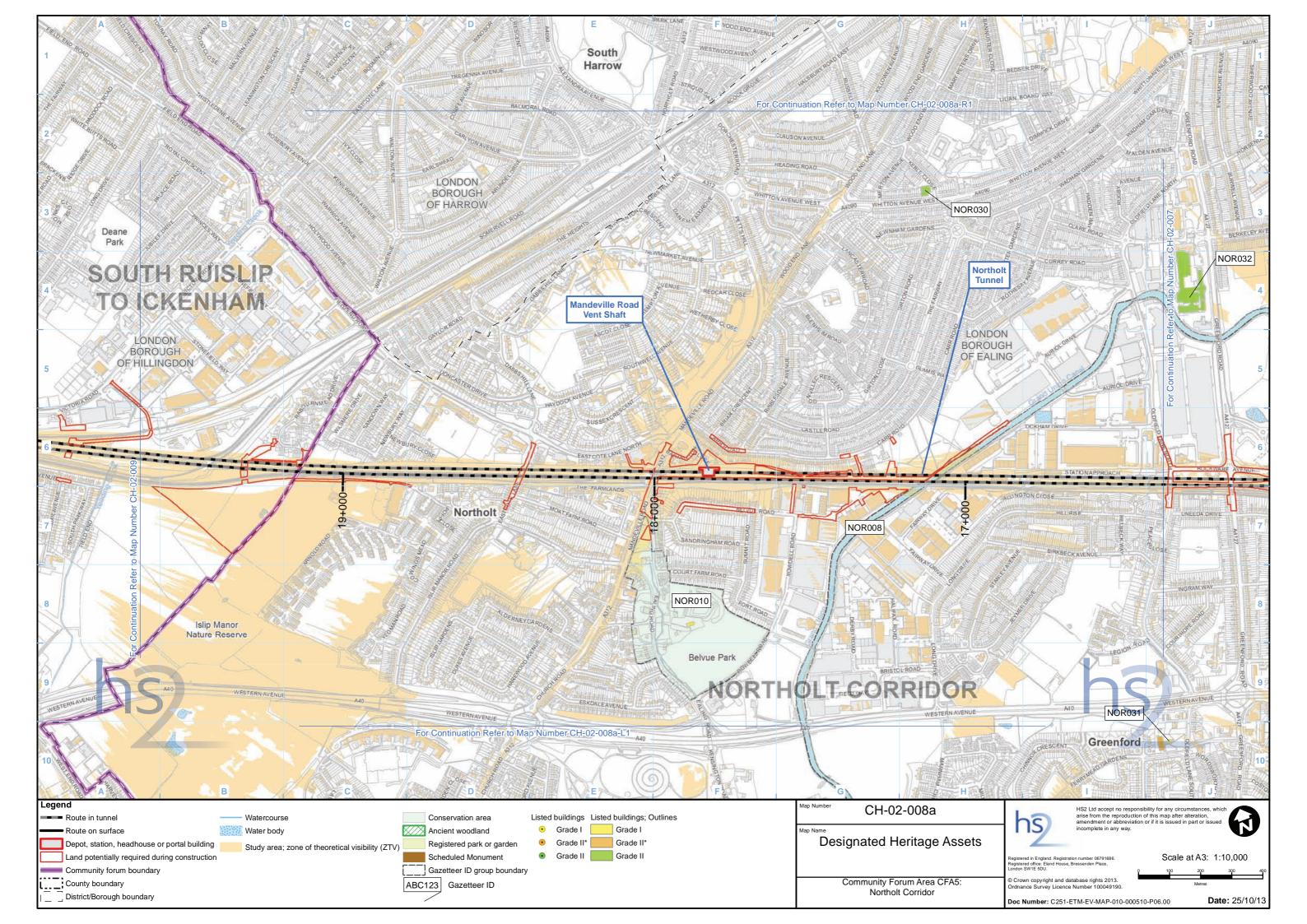


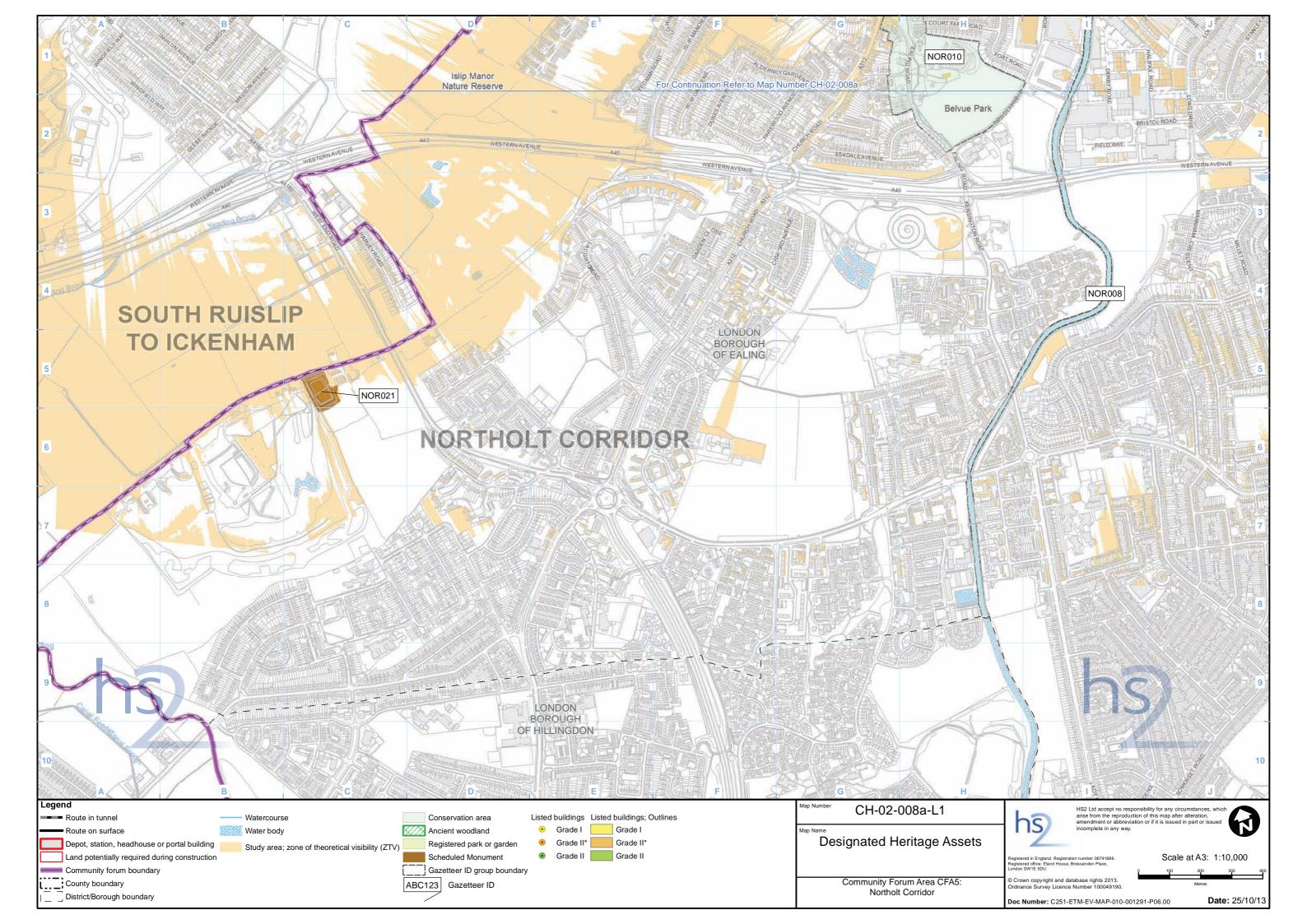


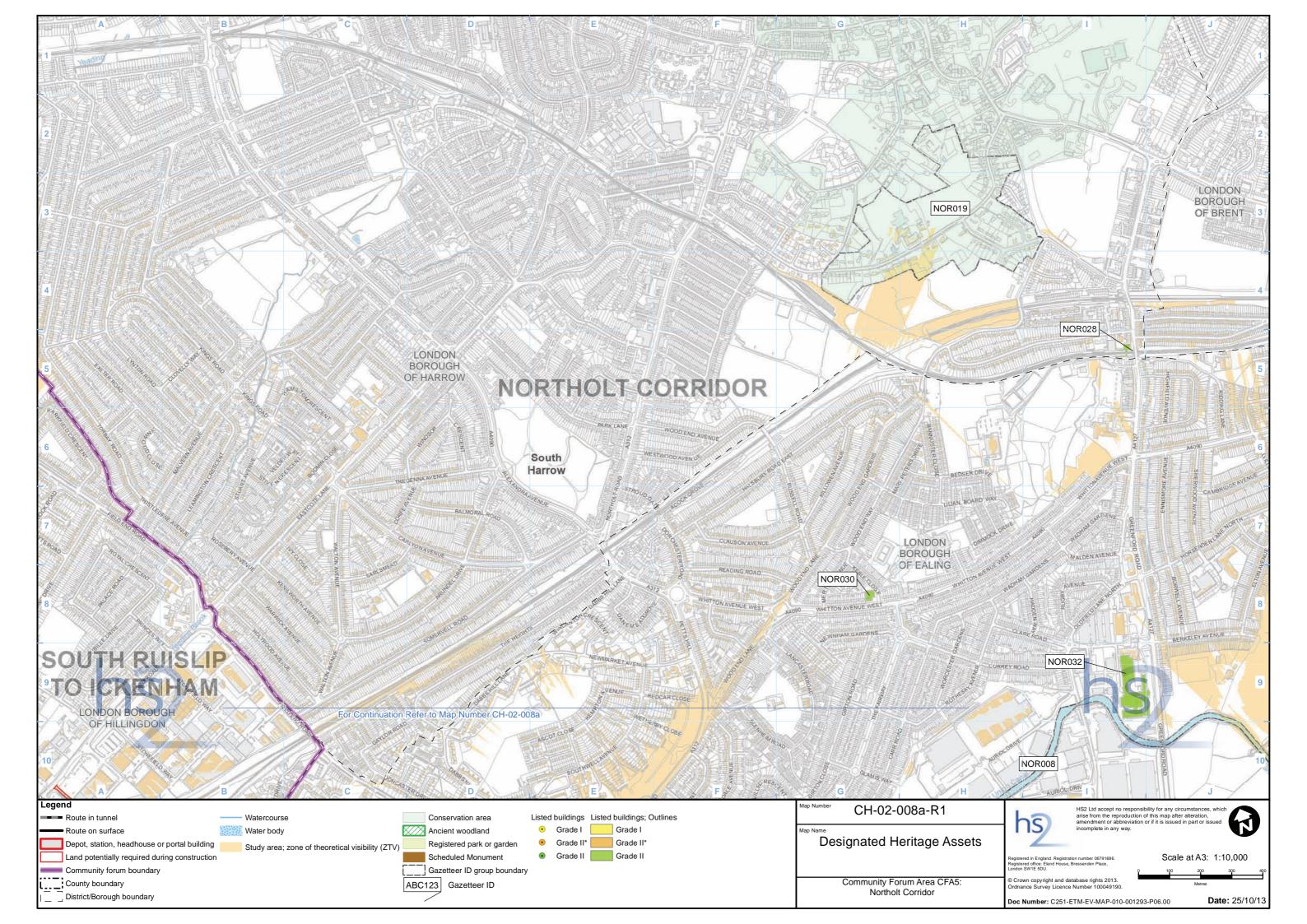




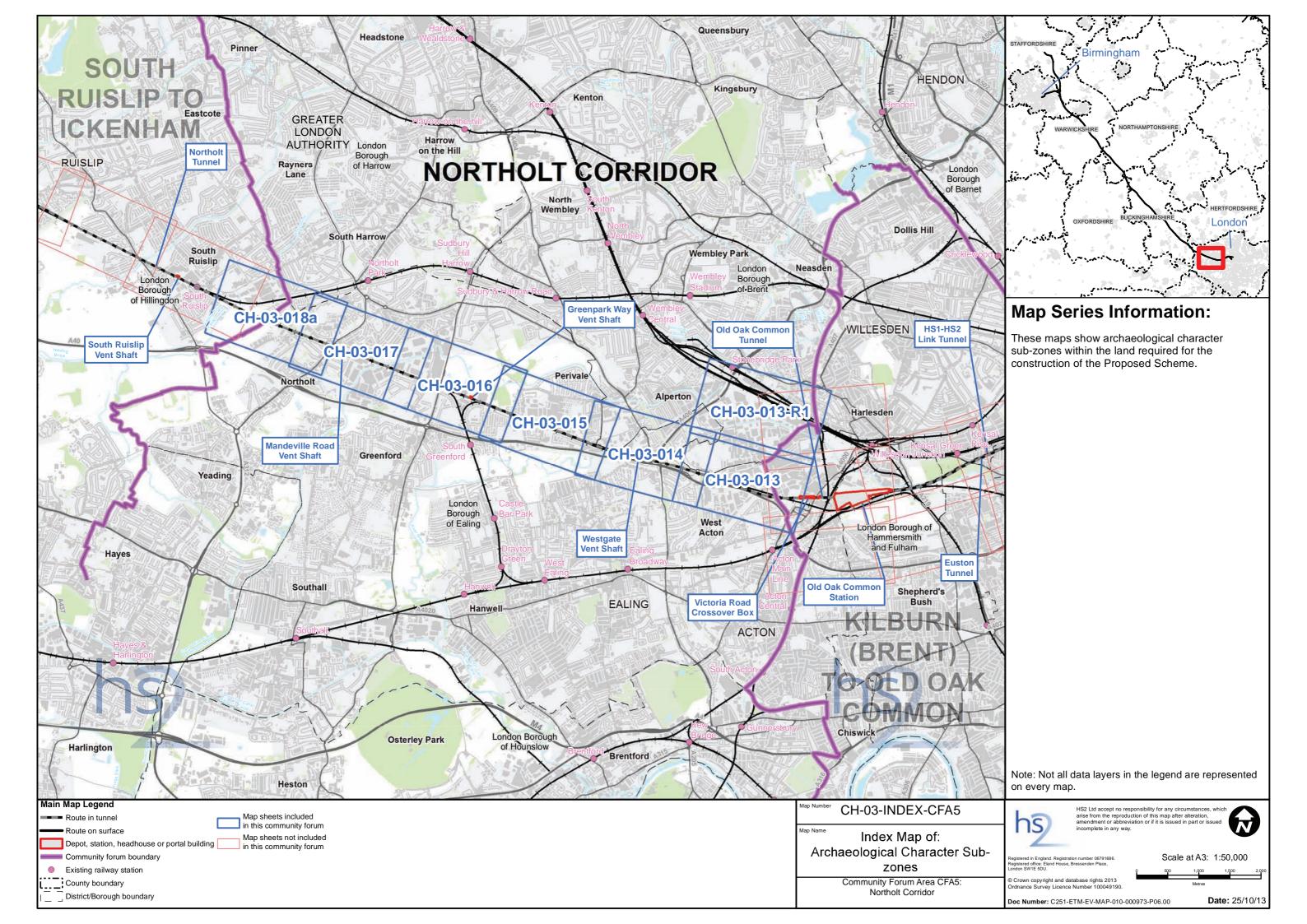


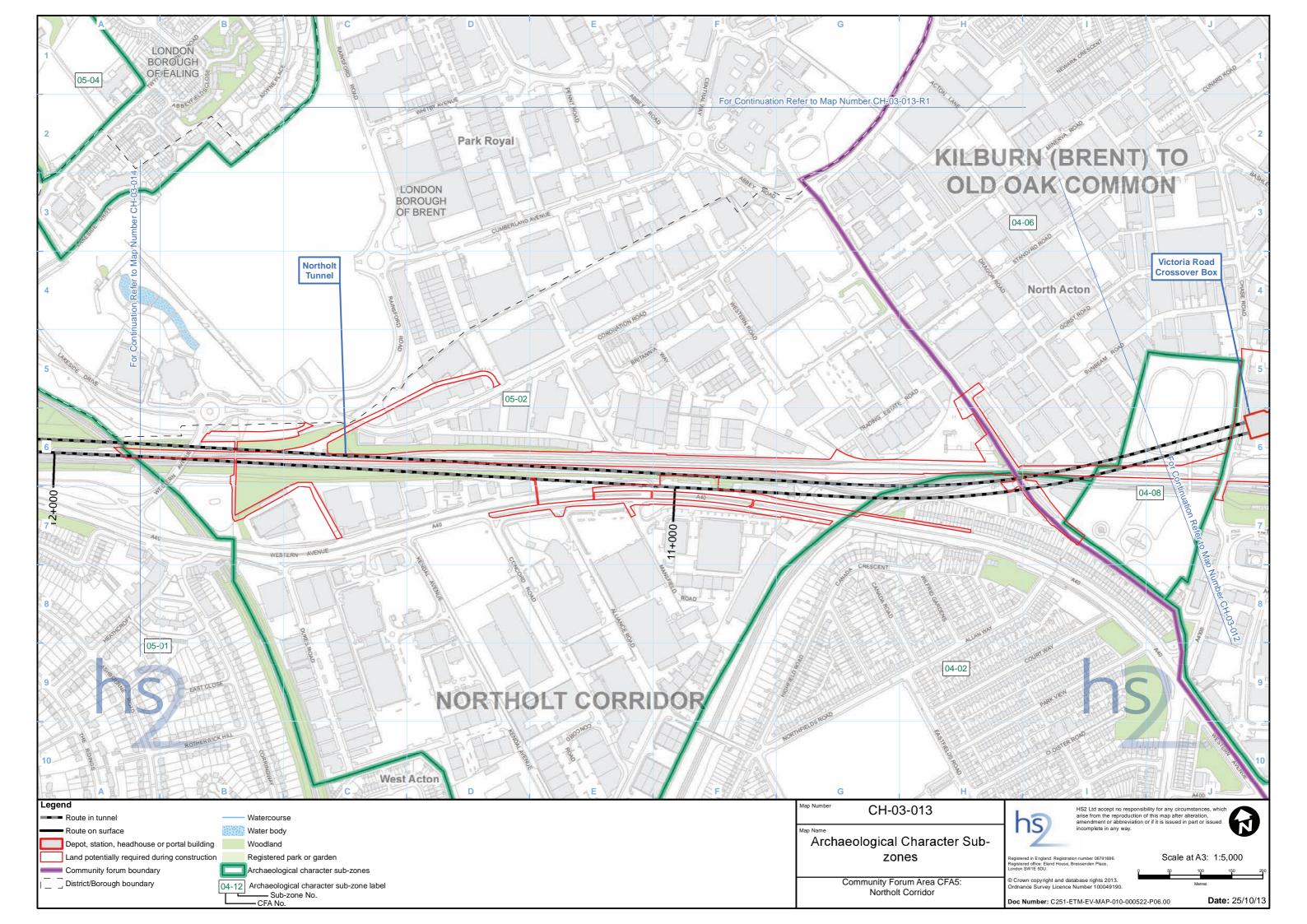


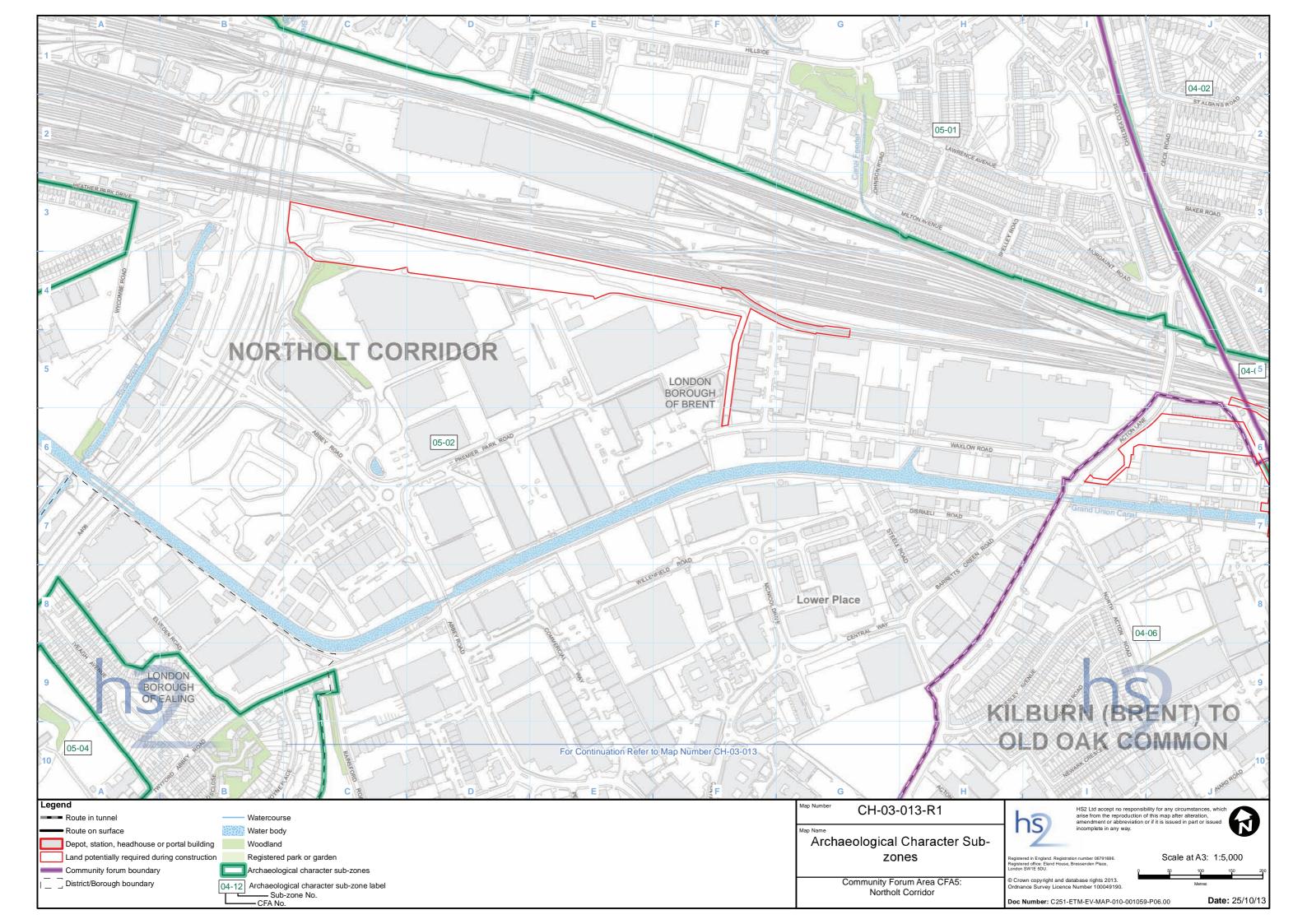


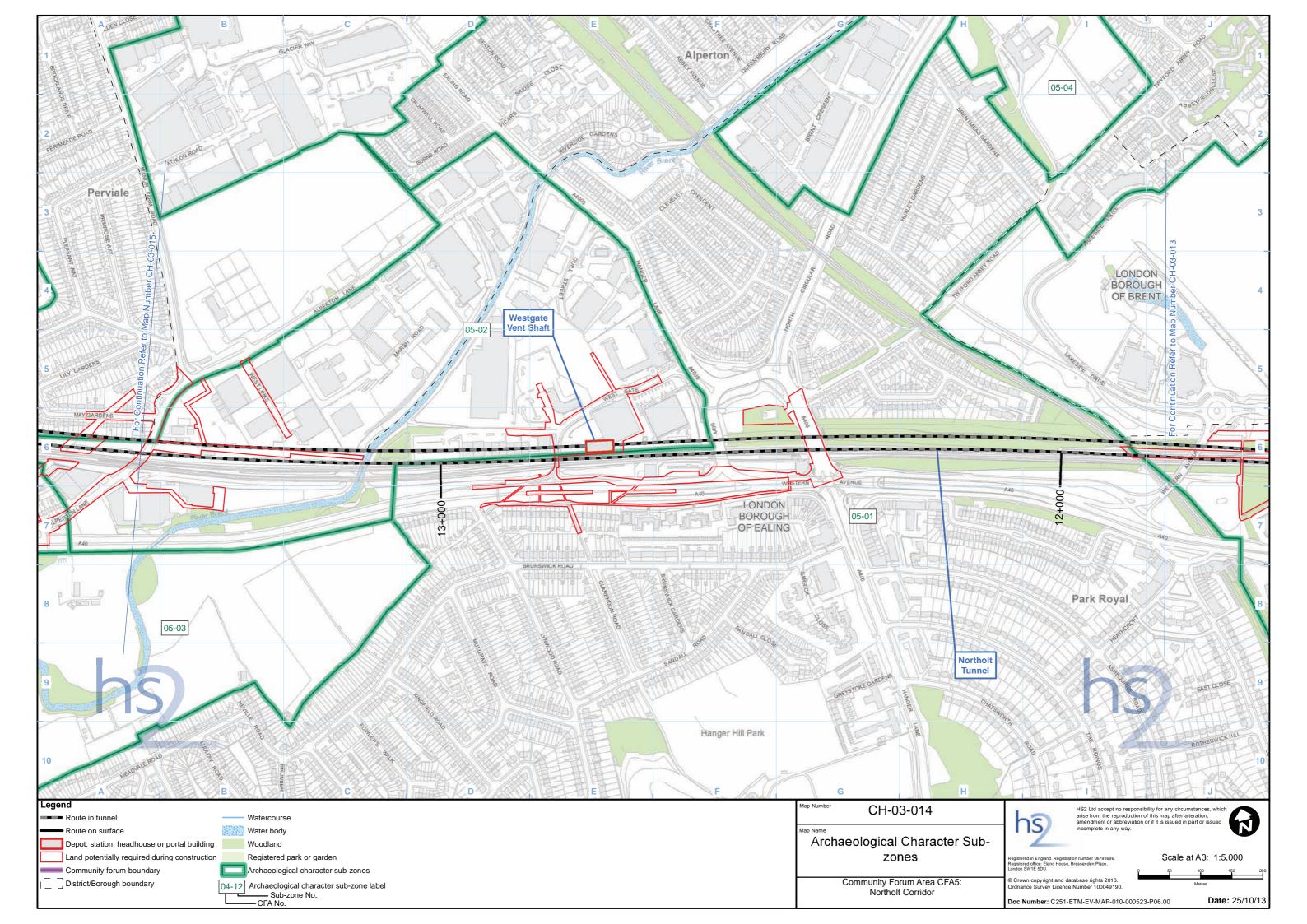


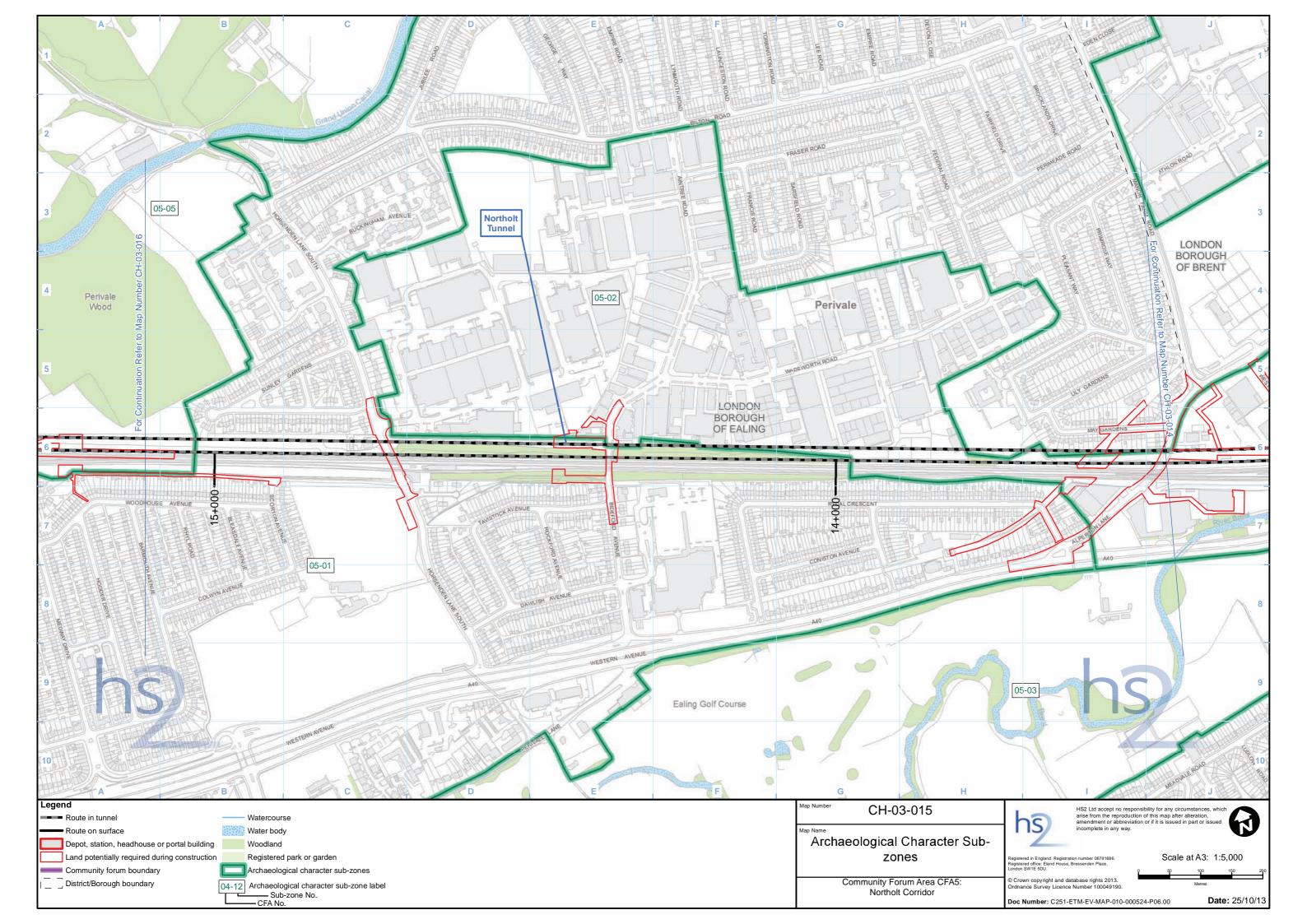
This page is left intentionally blank

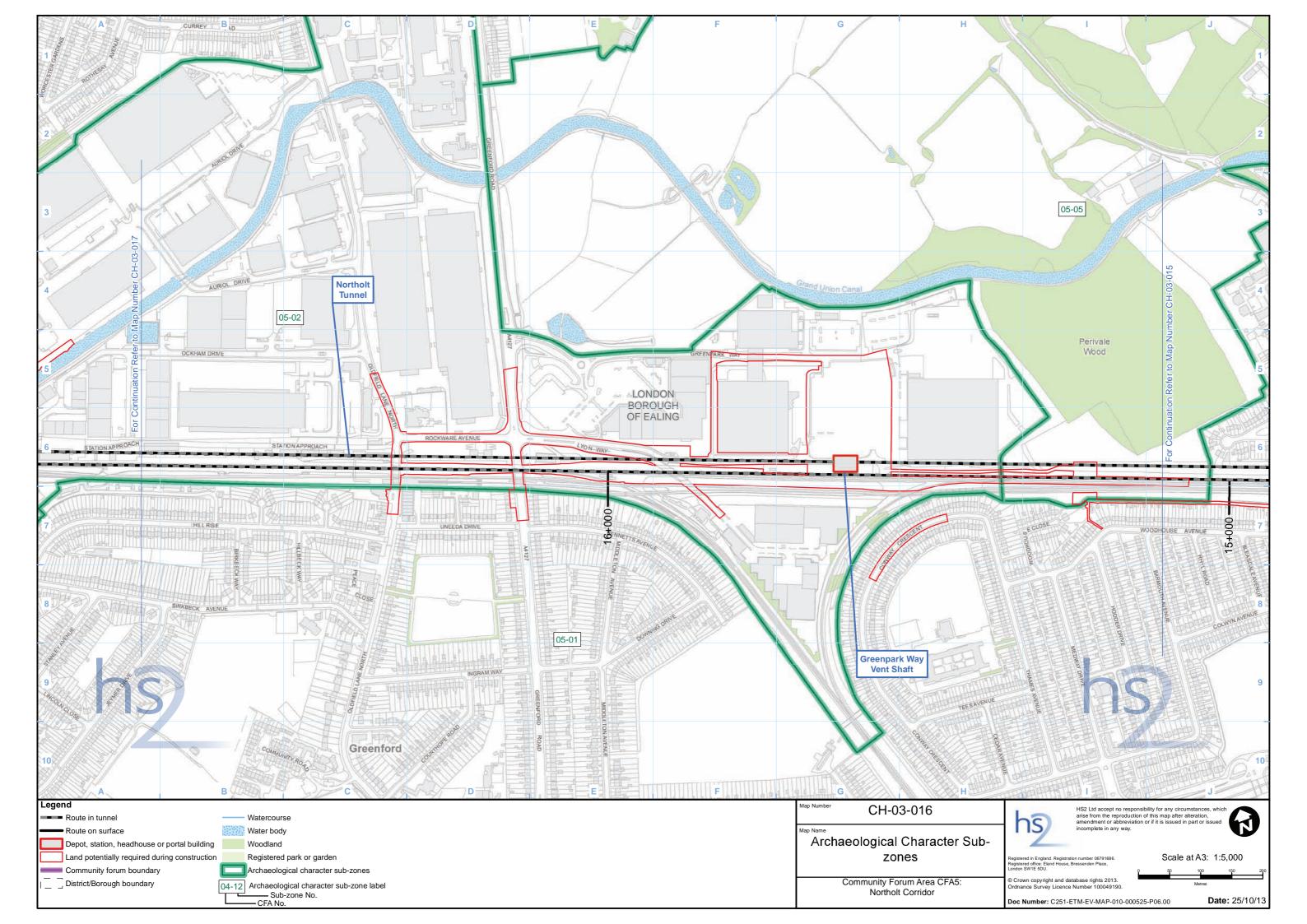


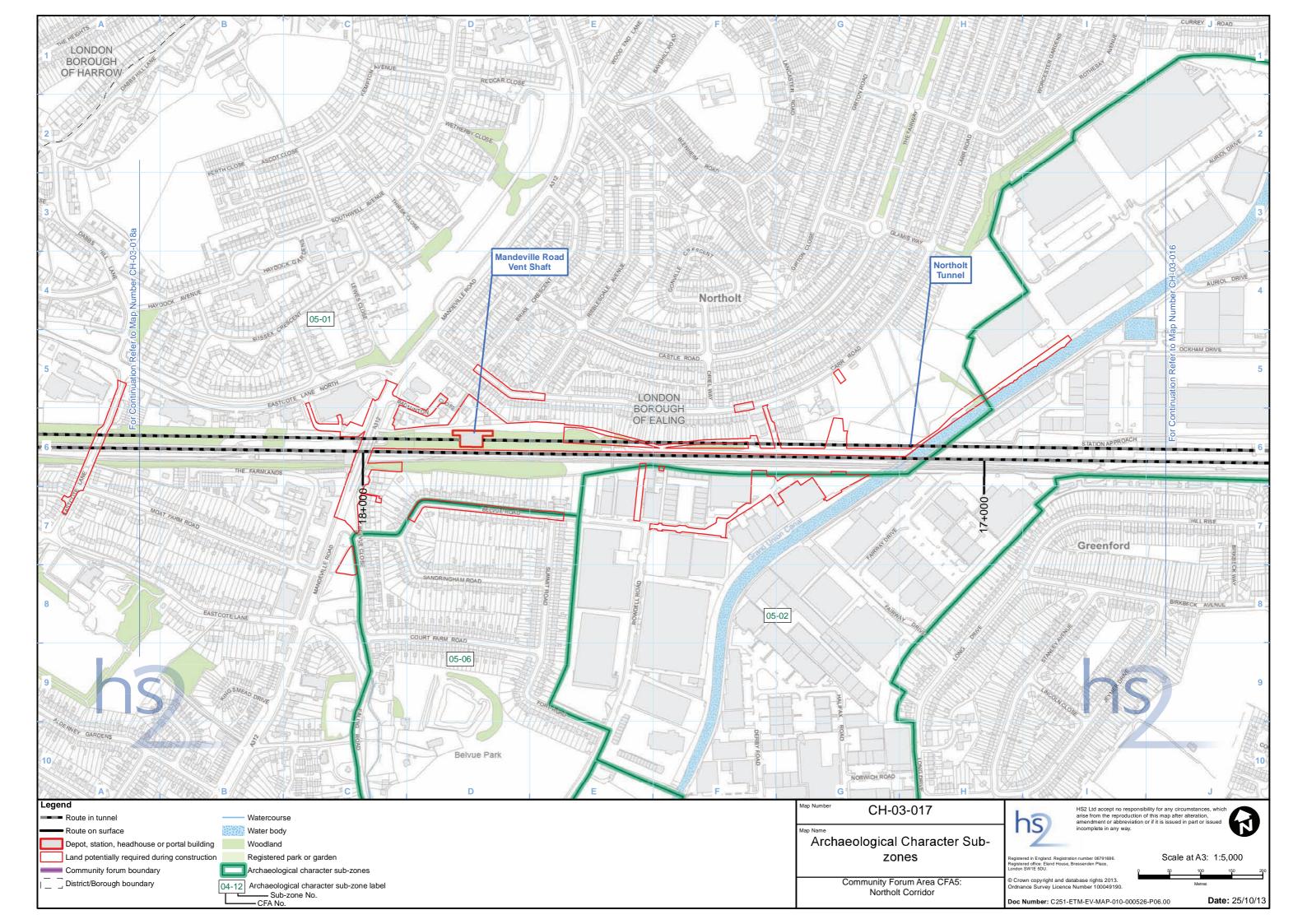


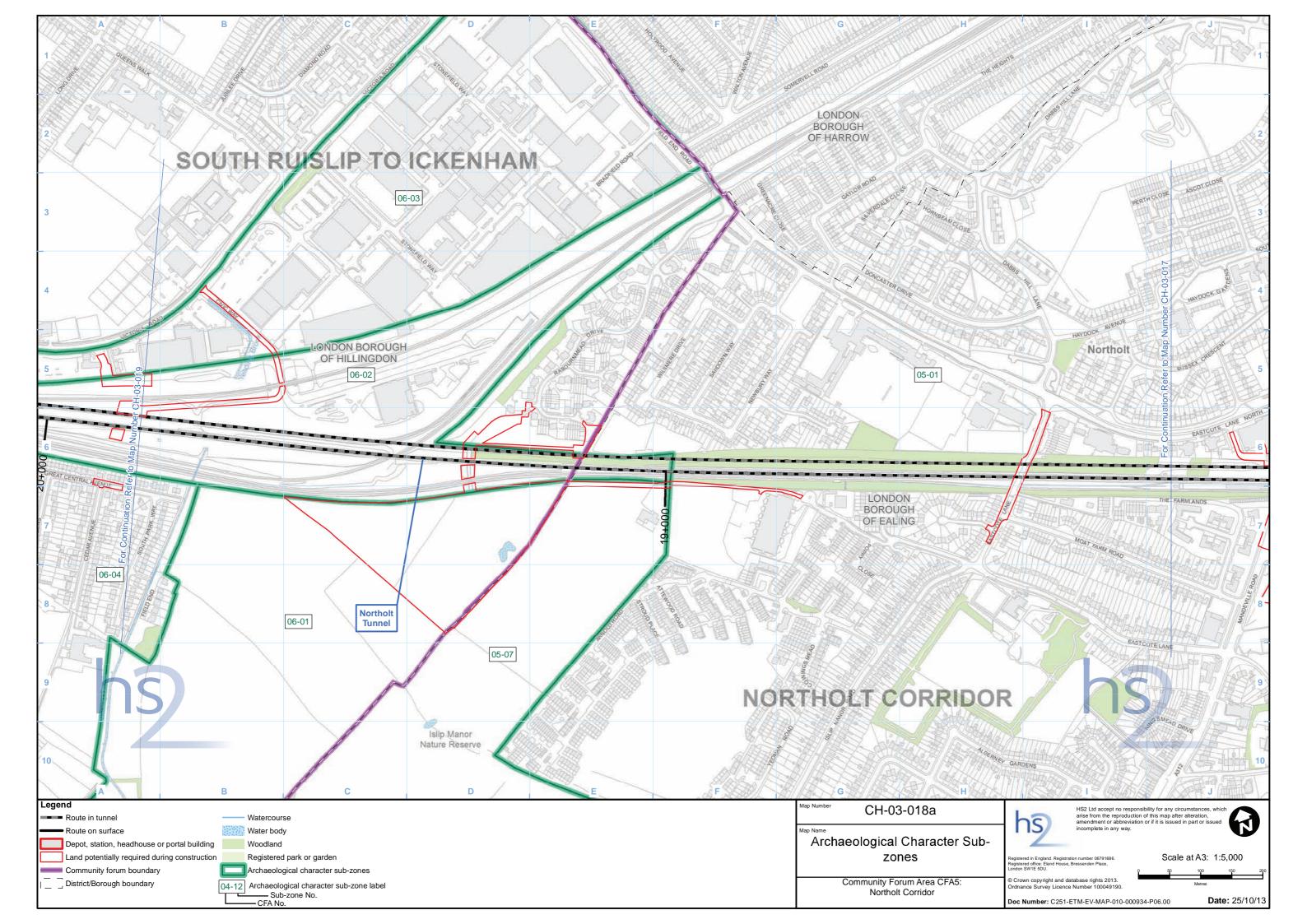












This page is left intentionally blank



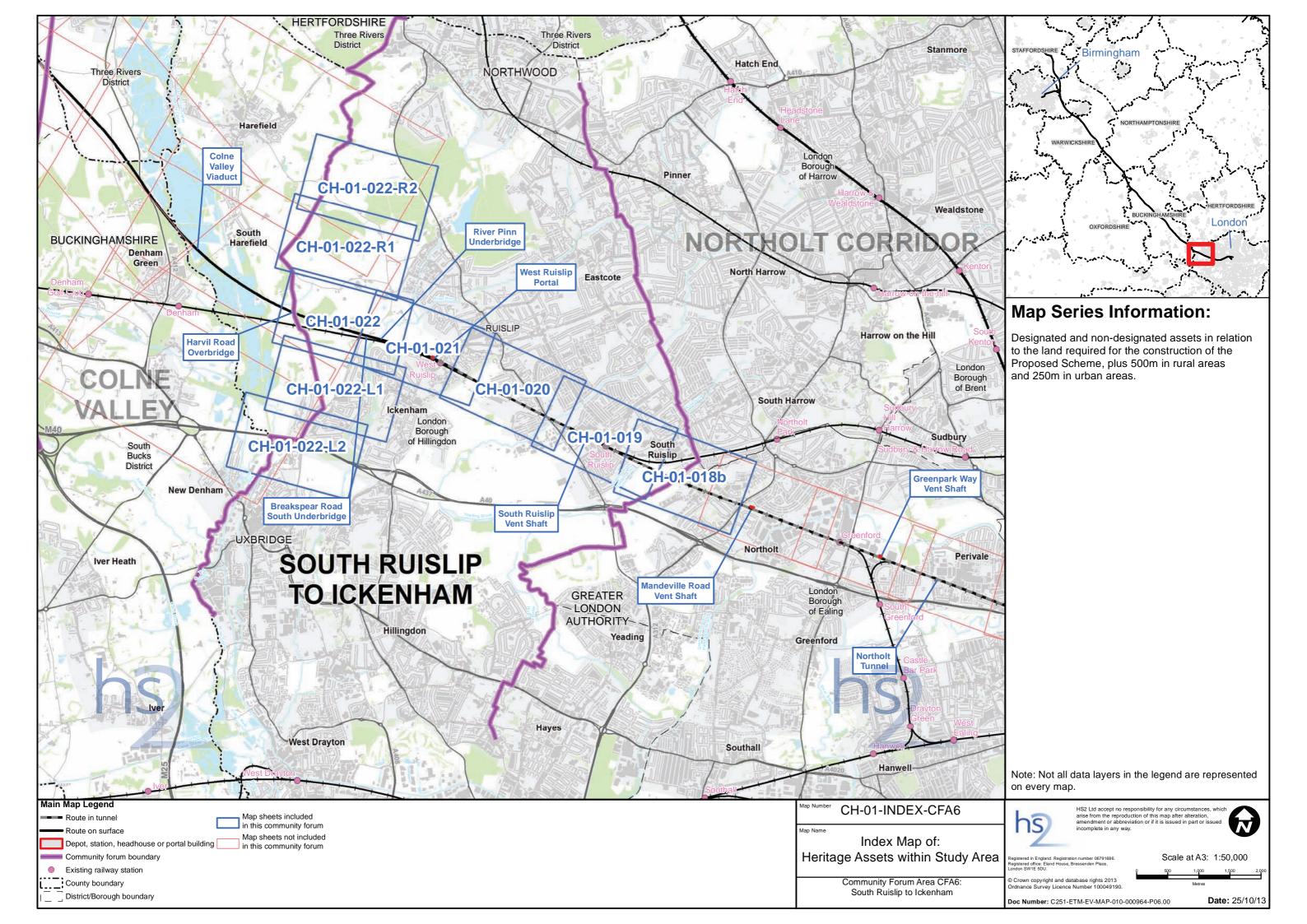
LONDON-WEST MIDLANDS ENVIRONMENTAL STATEMENT

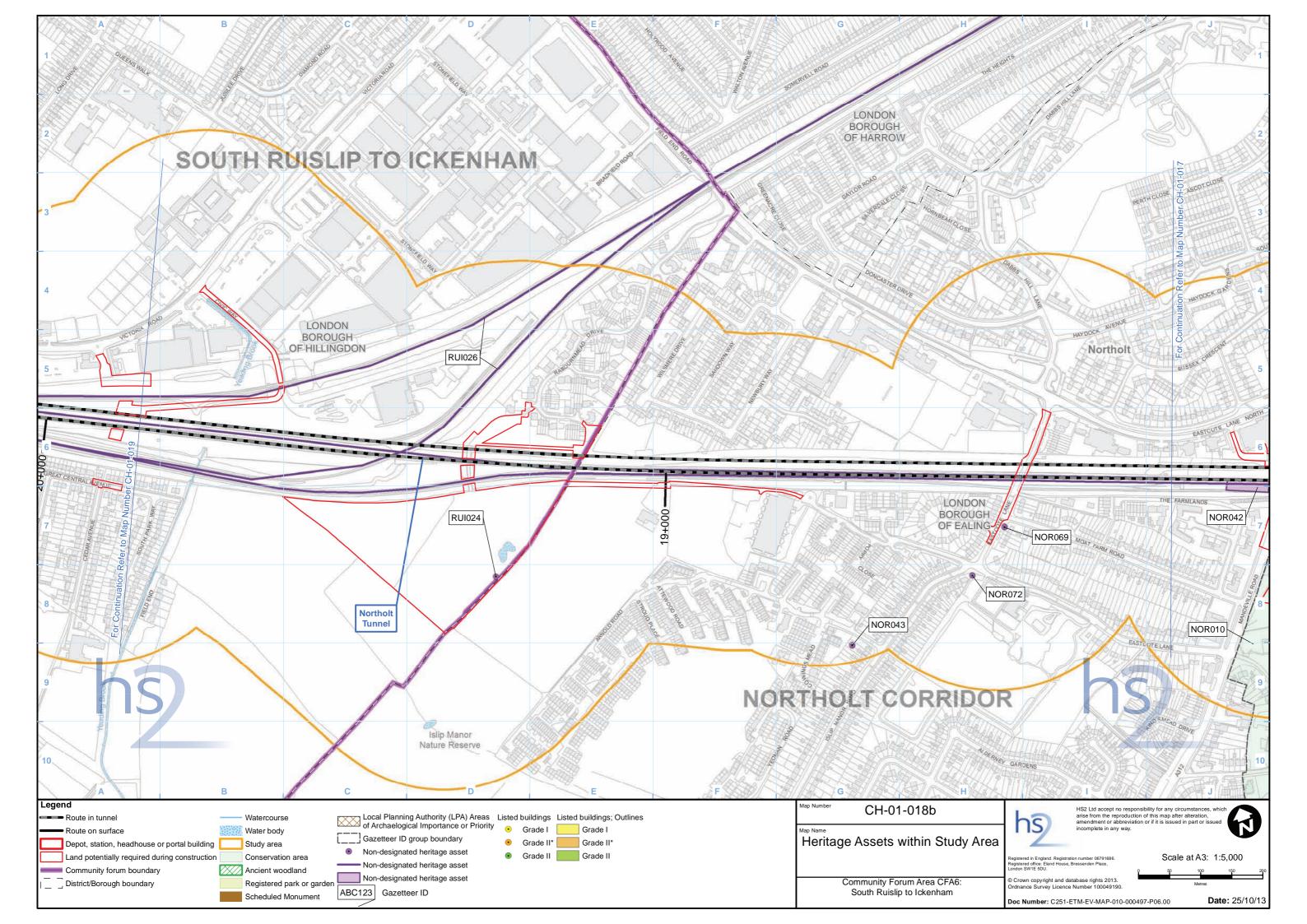
CFA6 | South Ruislip to Ickenham

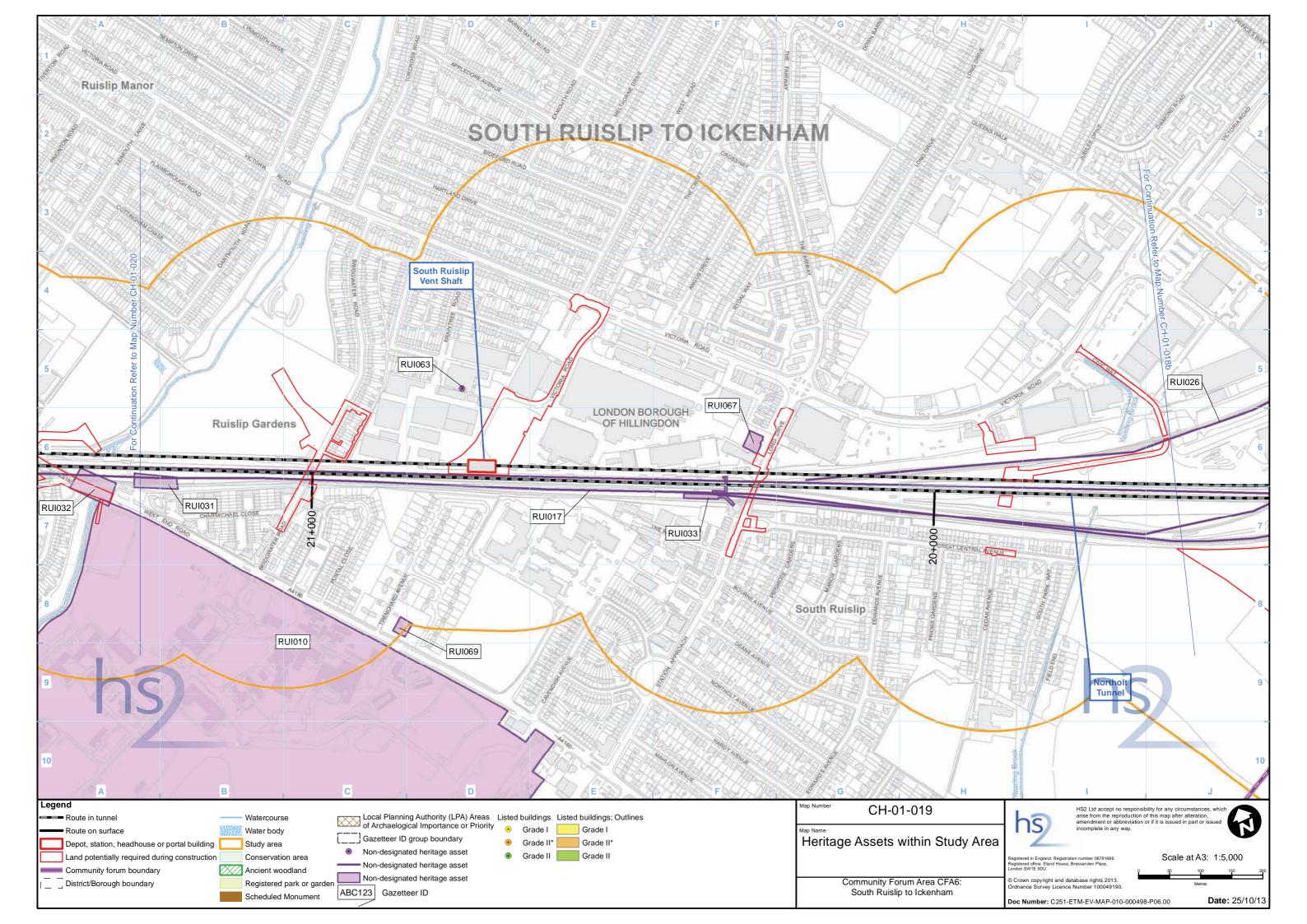
CH-o1 - Heritage Assets within Study Area

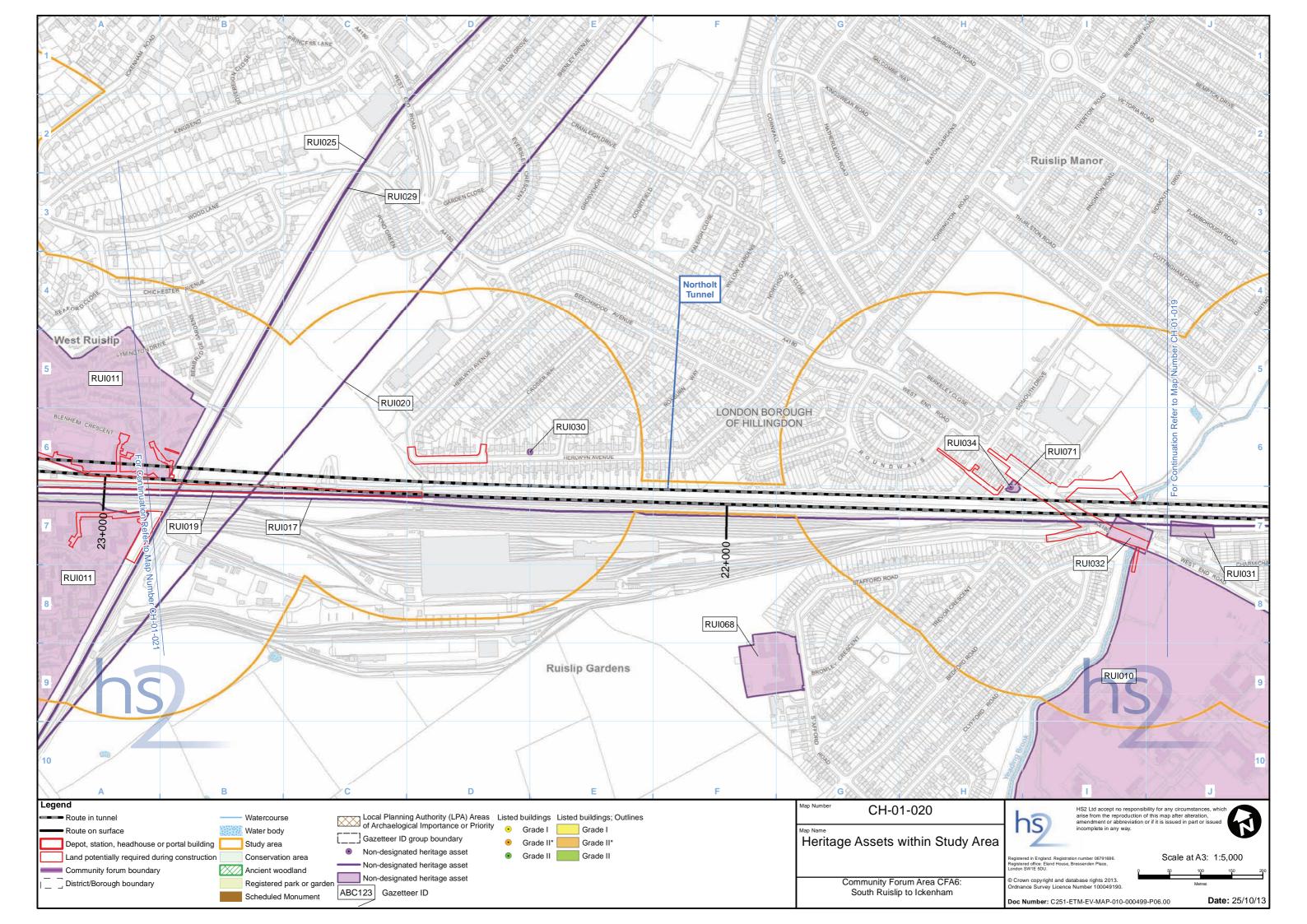
CH-o2 - Designated Heritage Assets

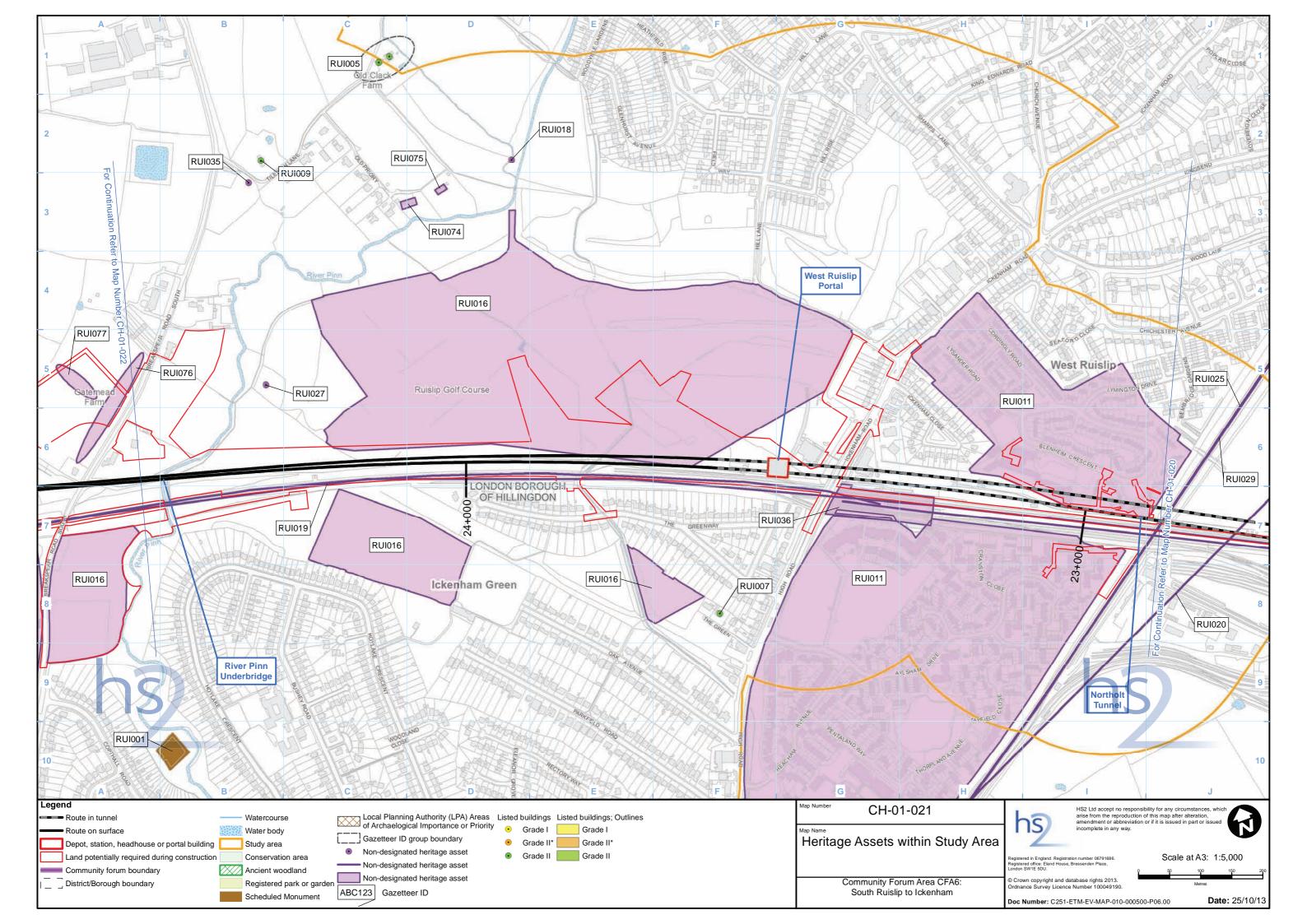
CH-o3 - Archaeological Character Sub-zones

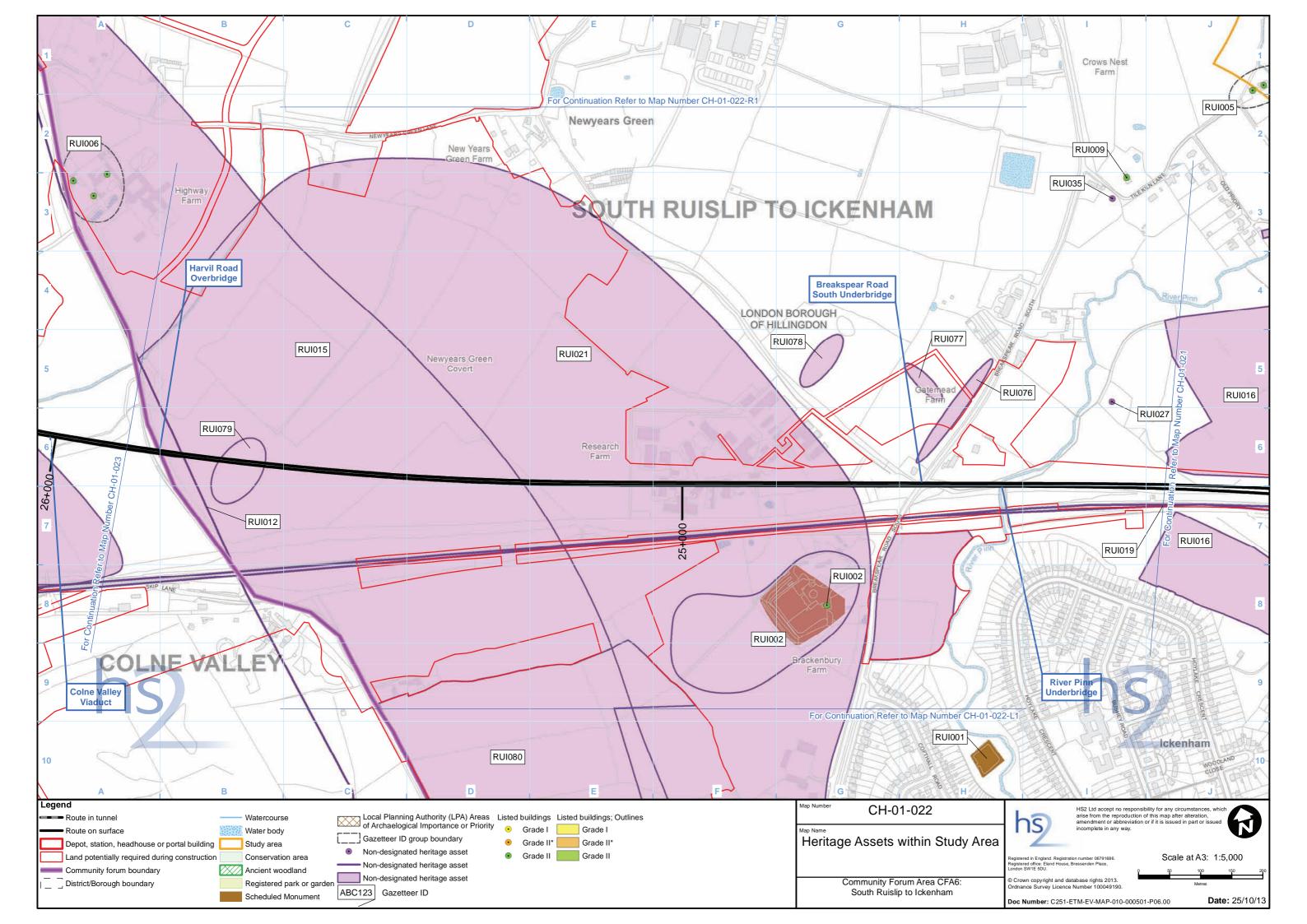


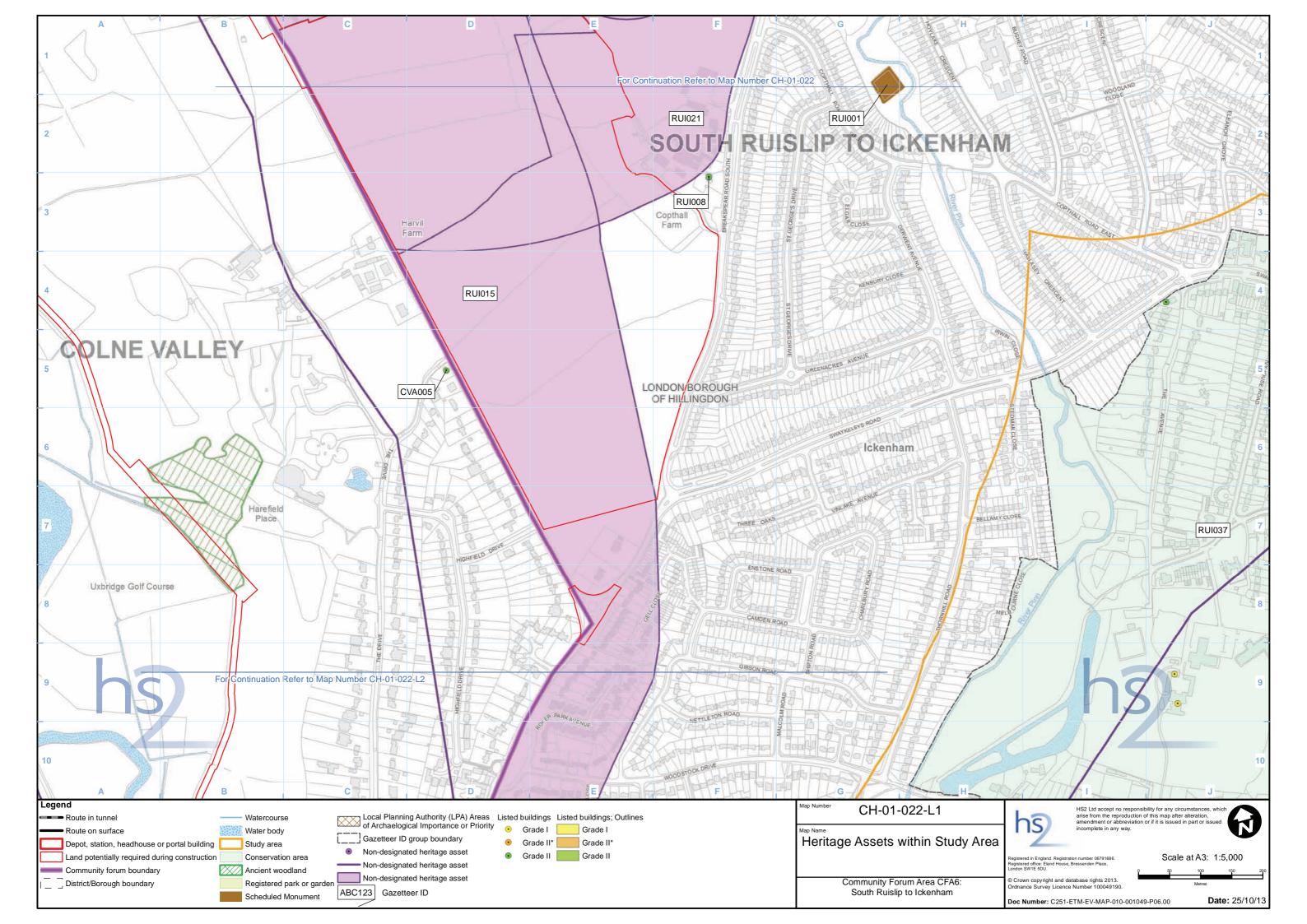


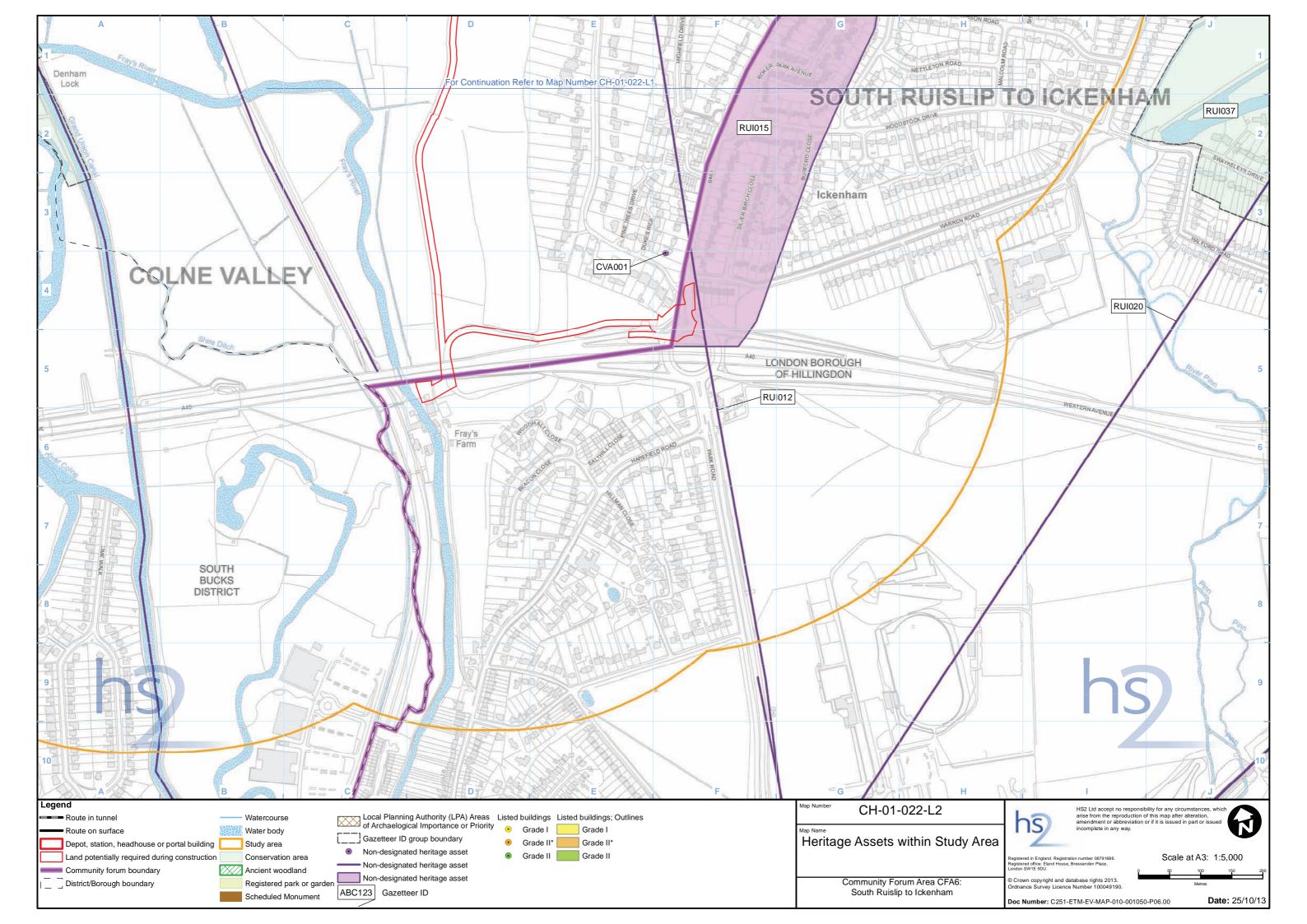


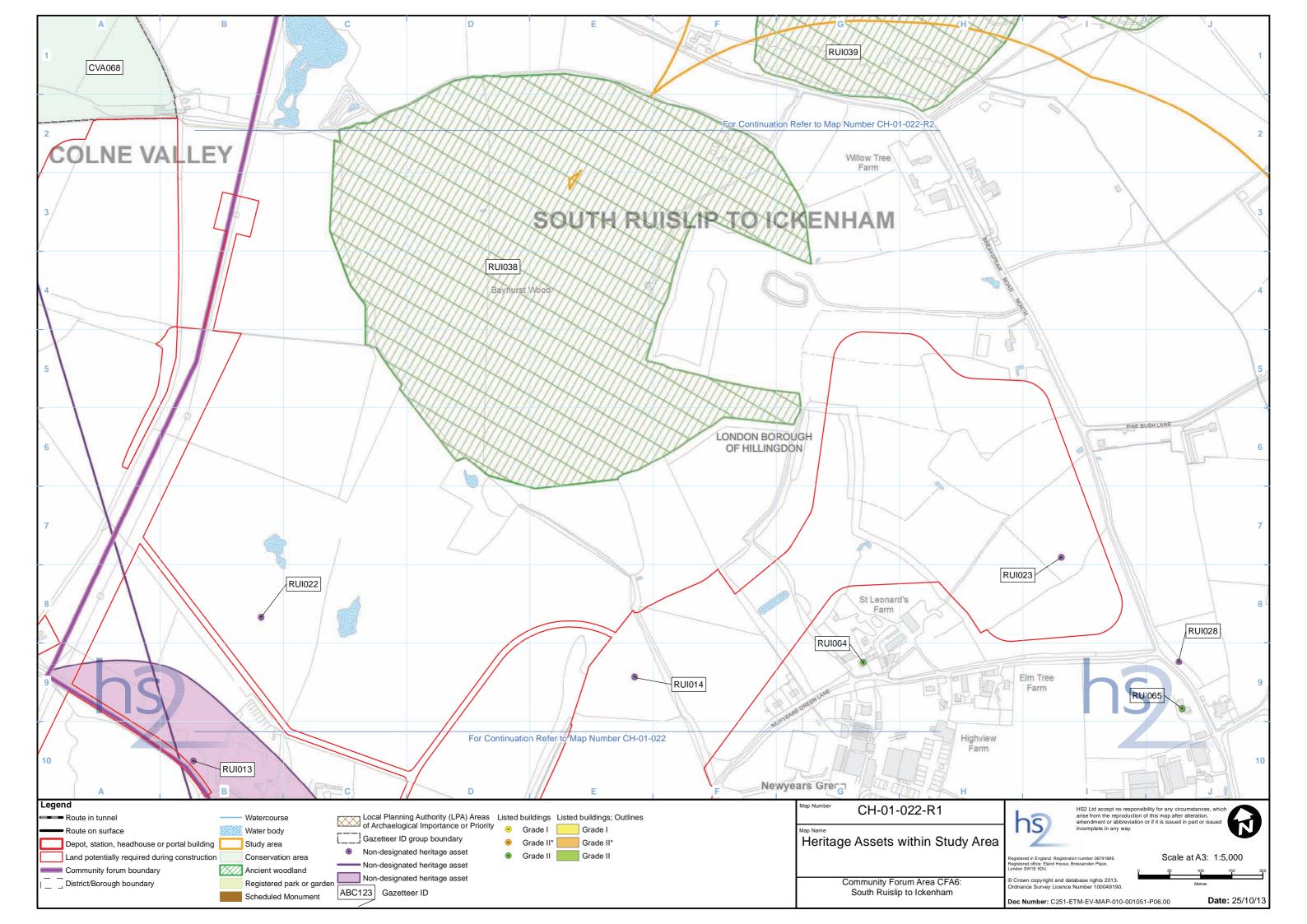


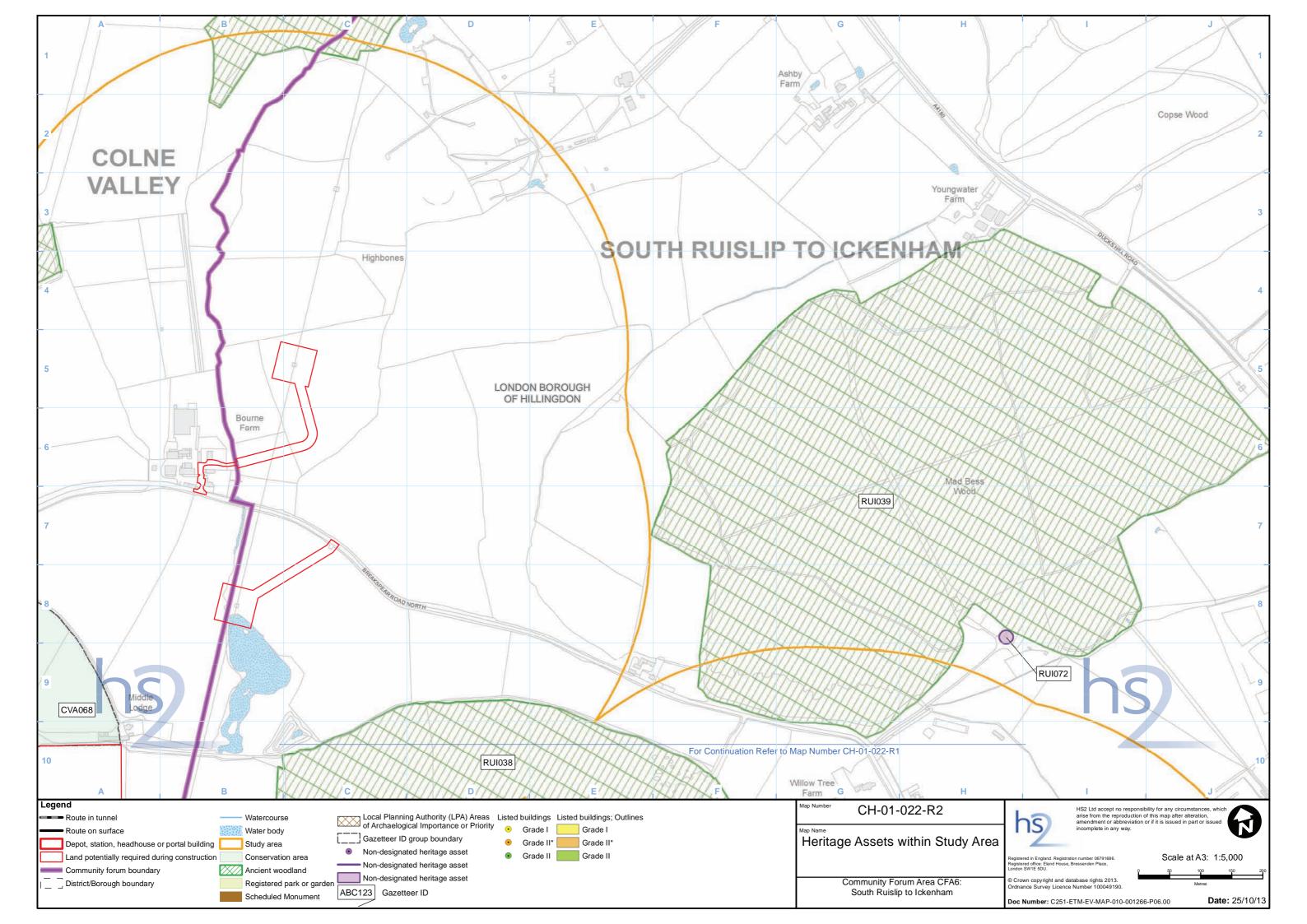


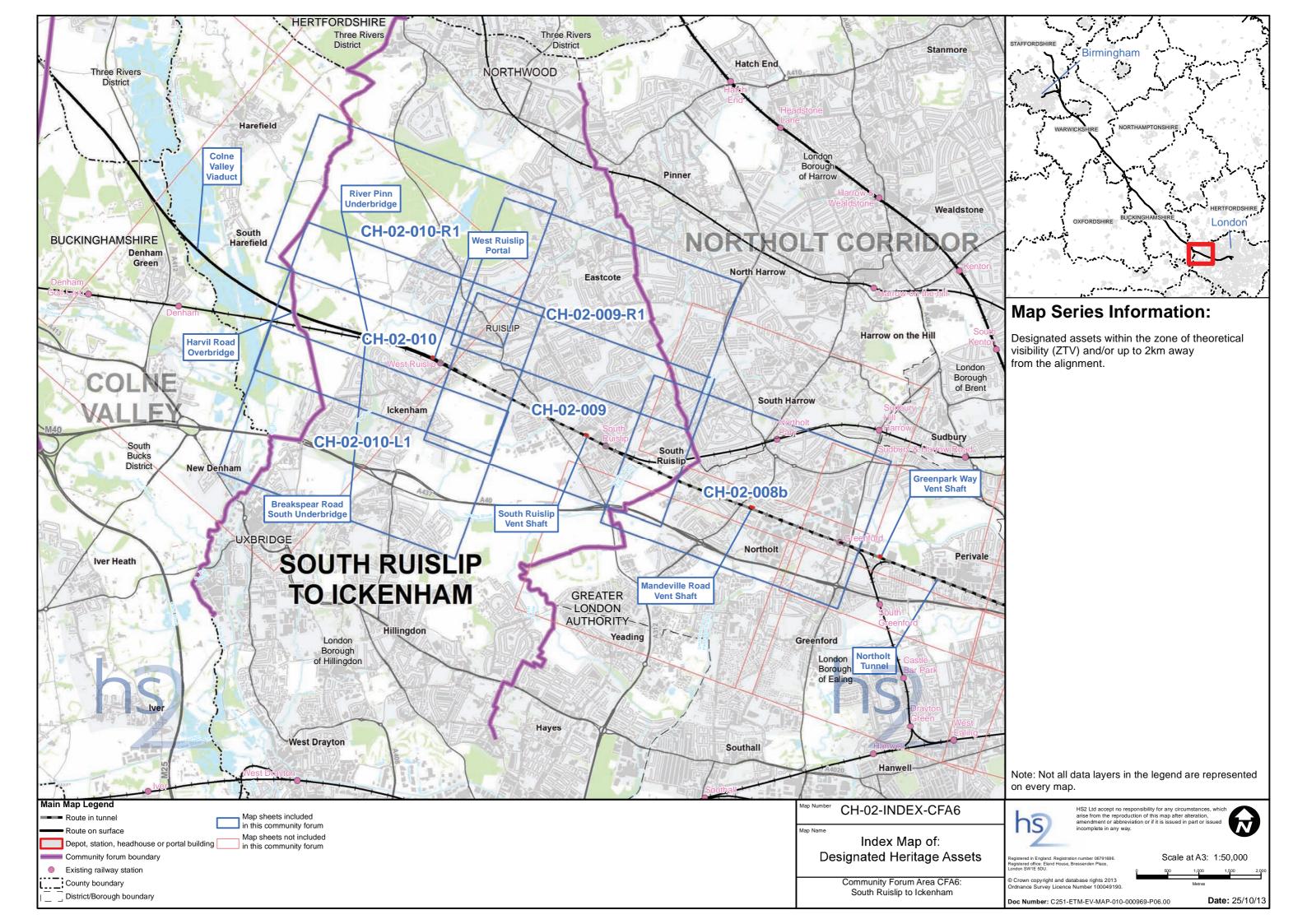


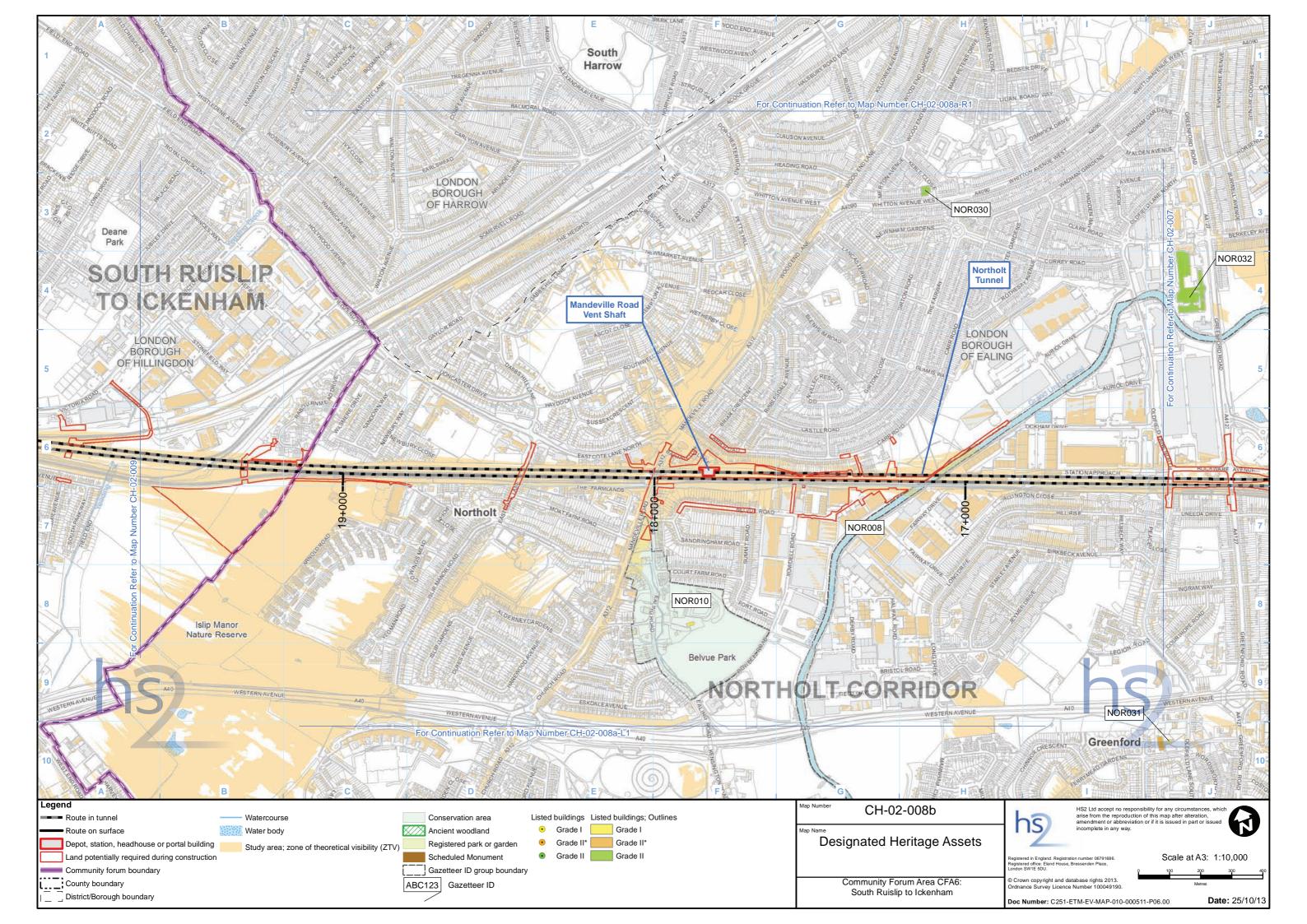


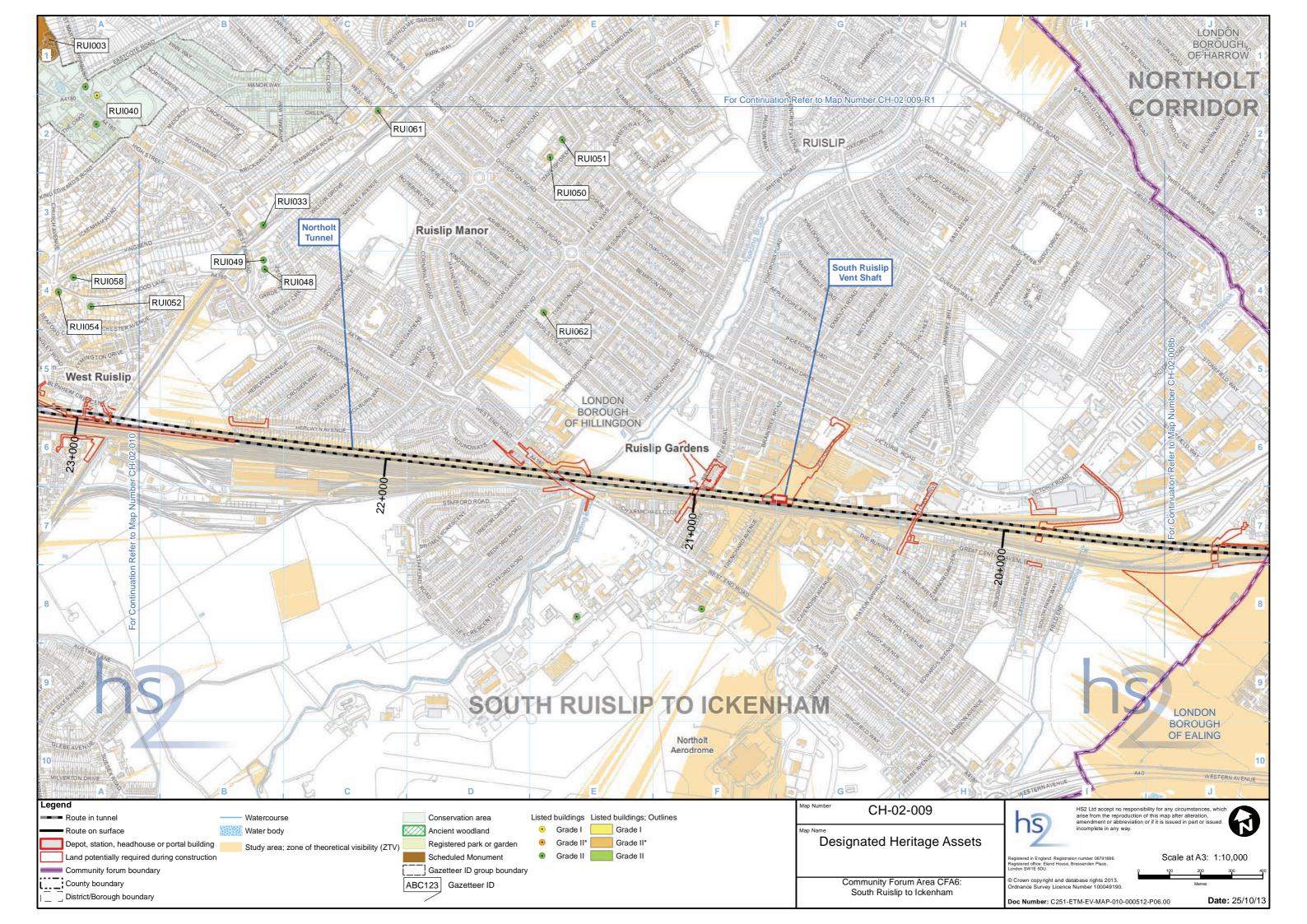


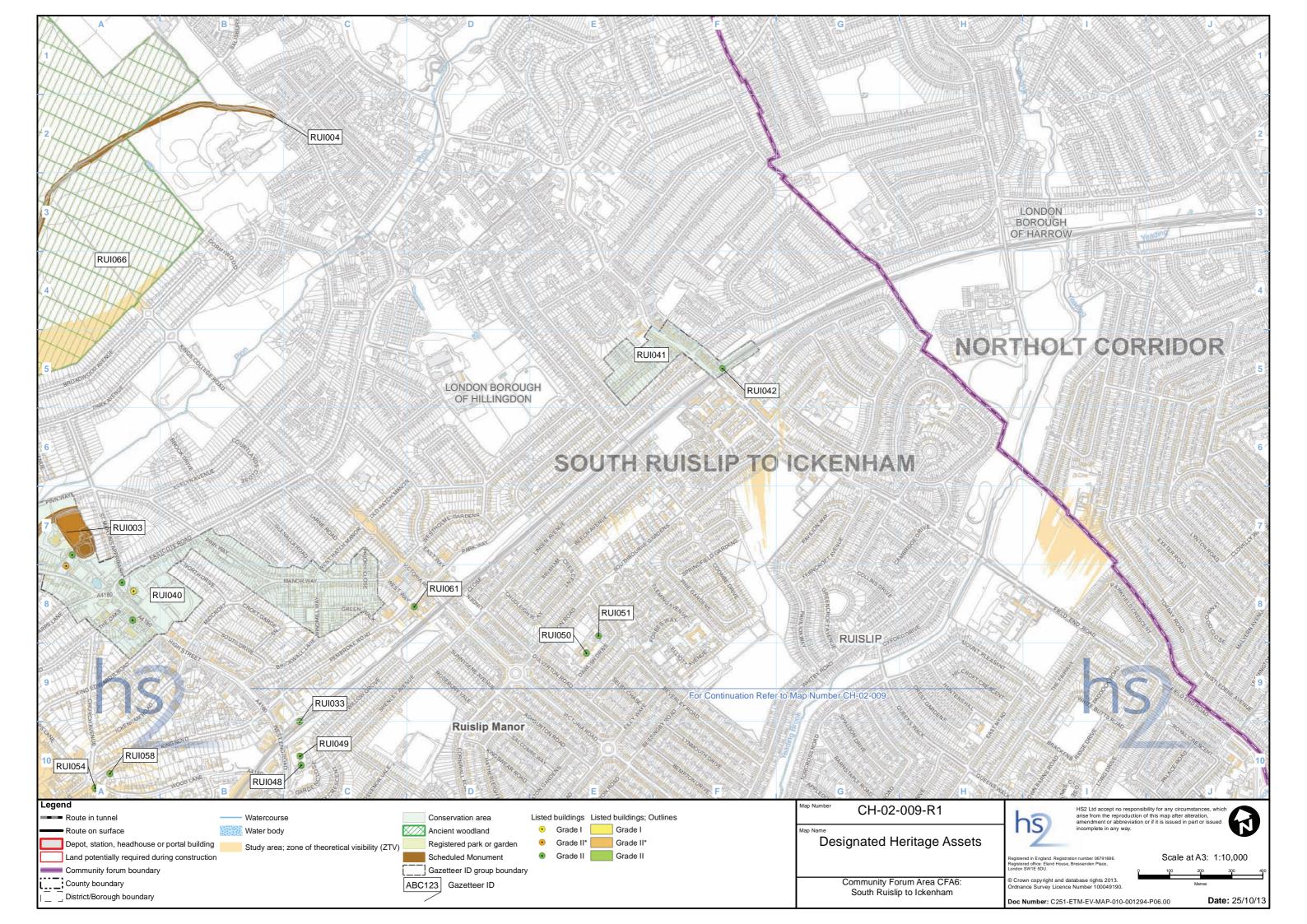


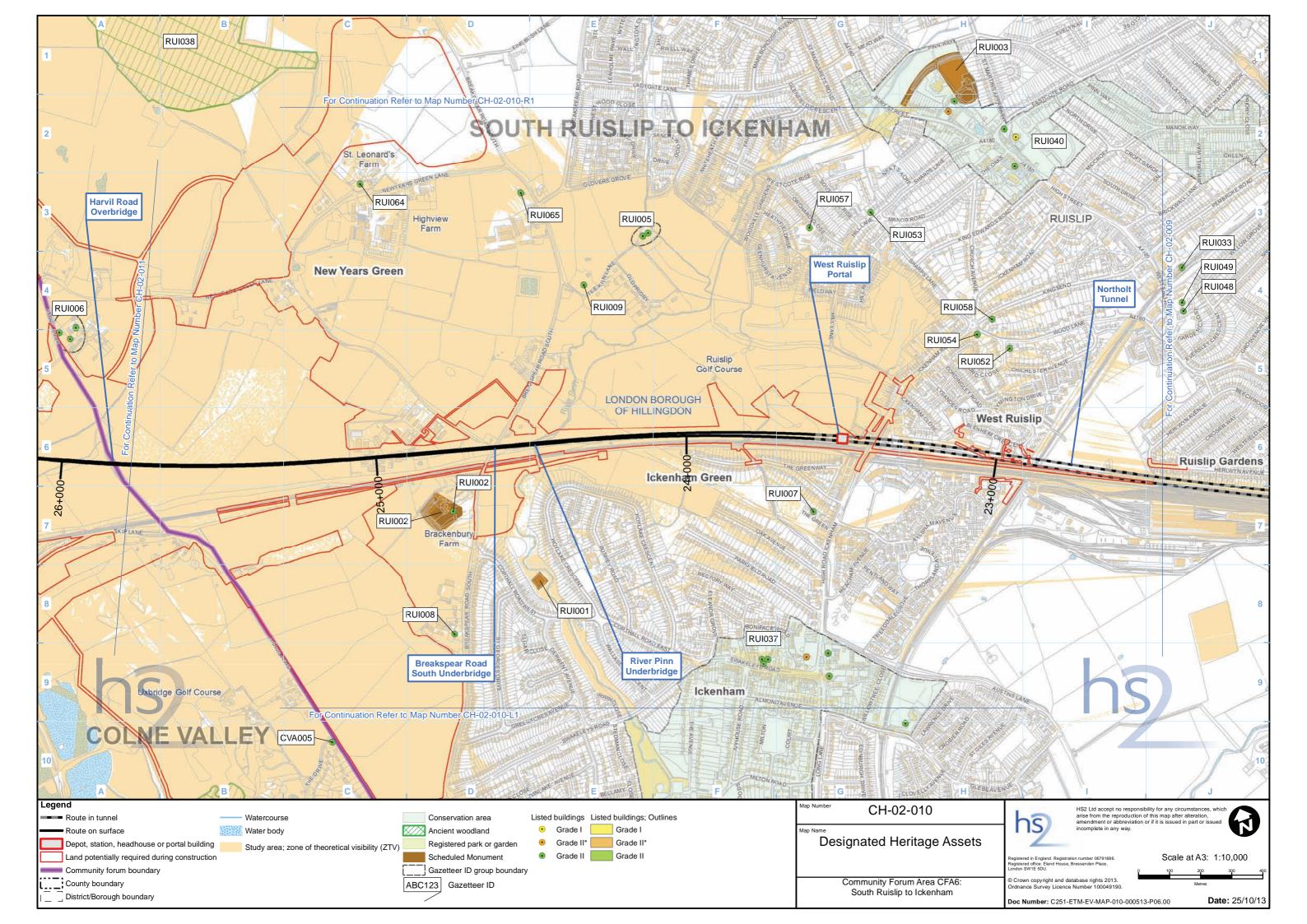


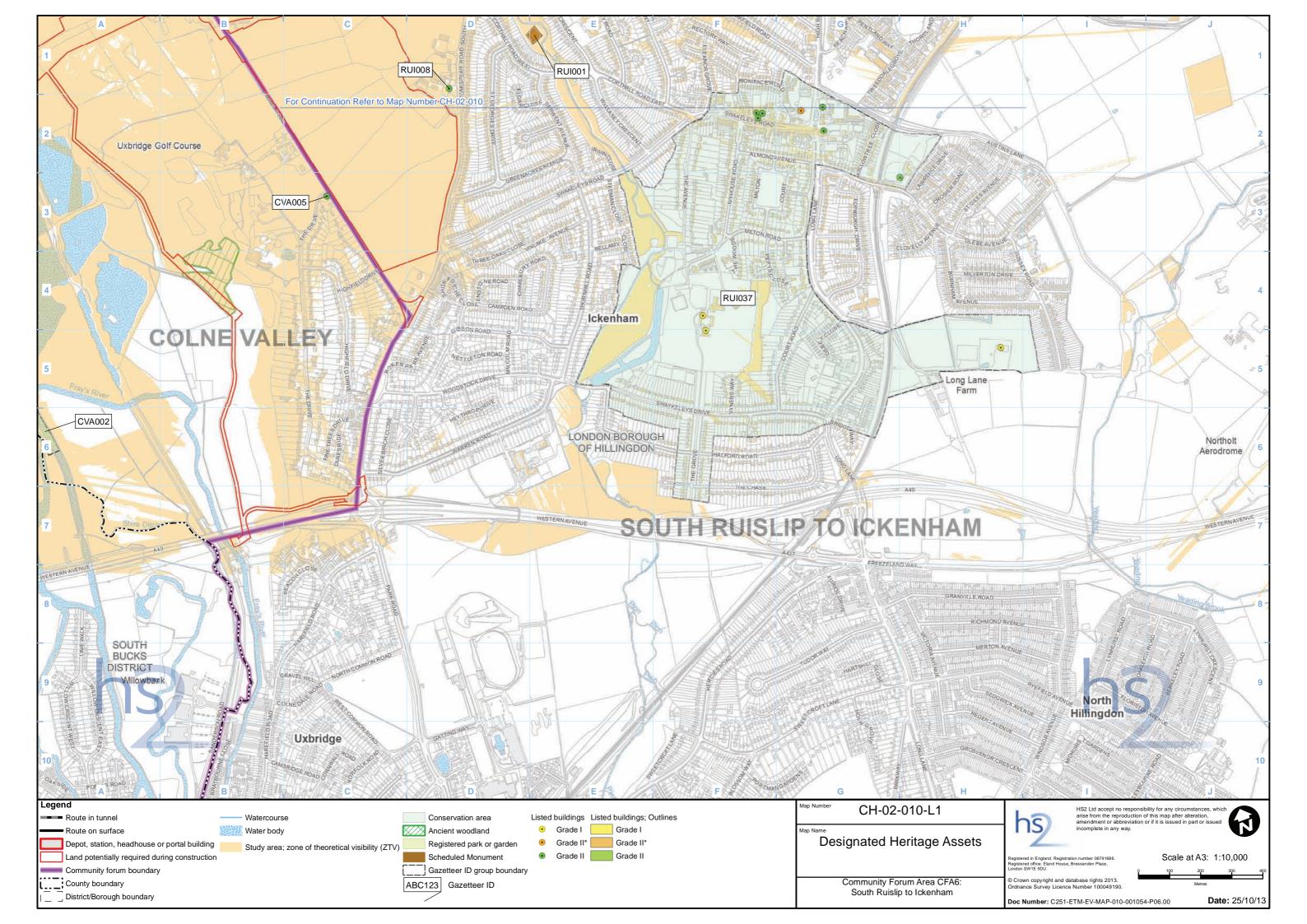


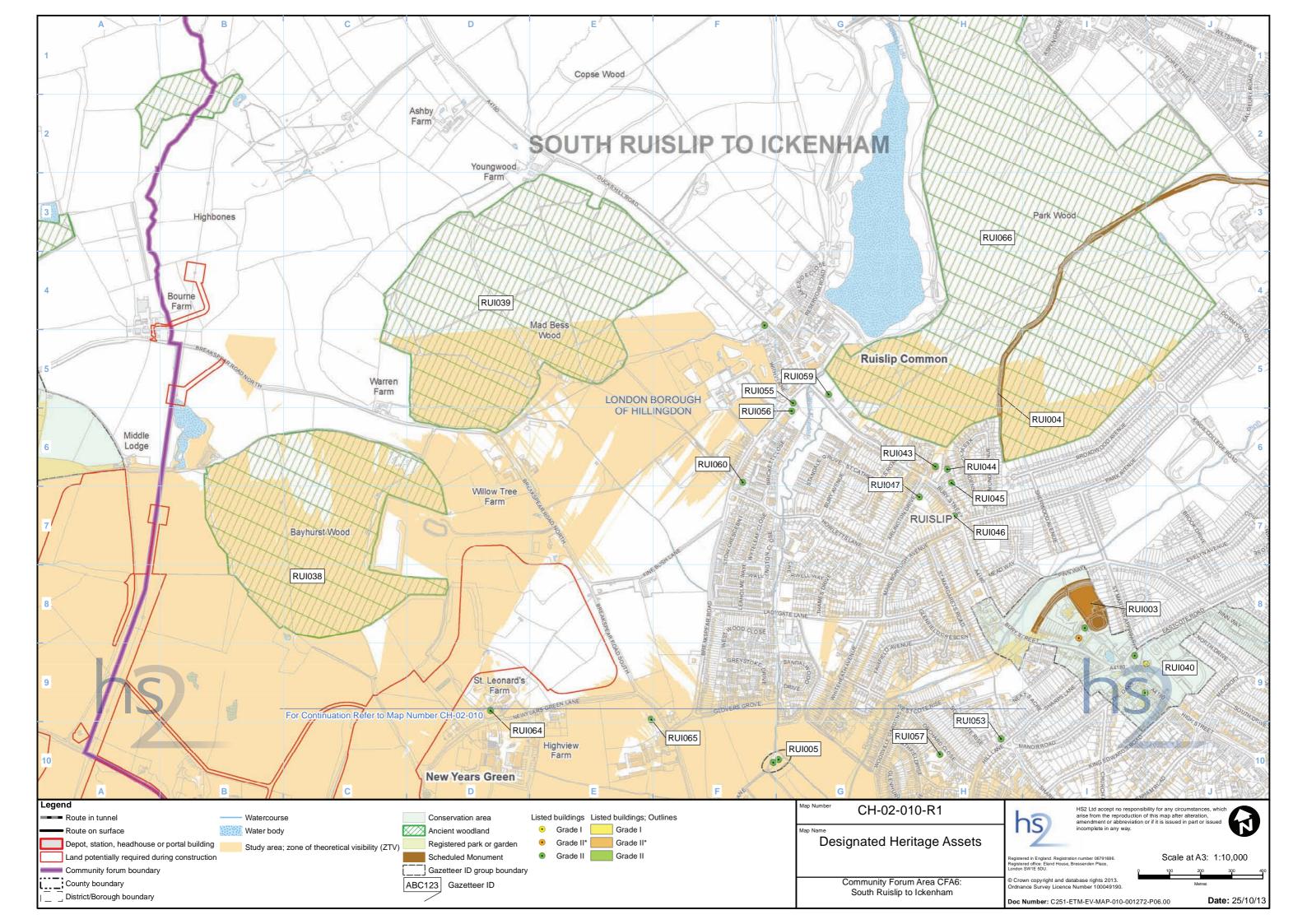




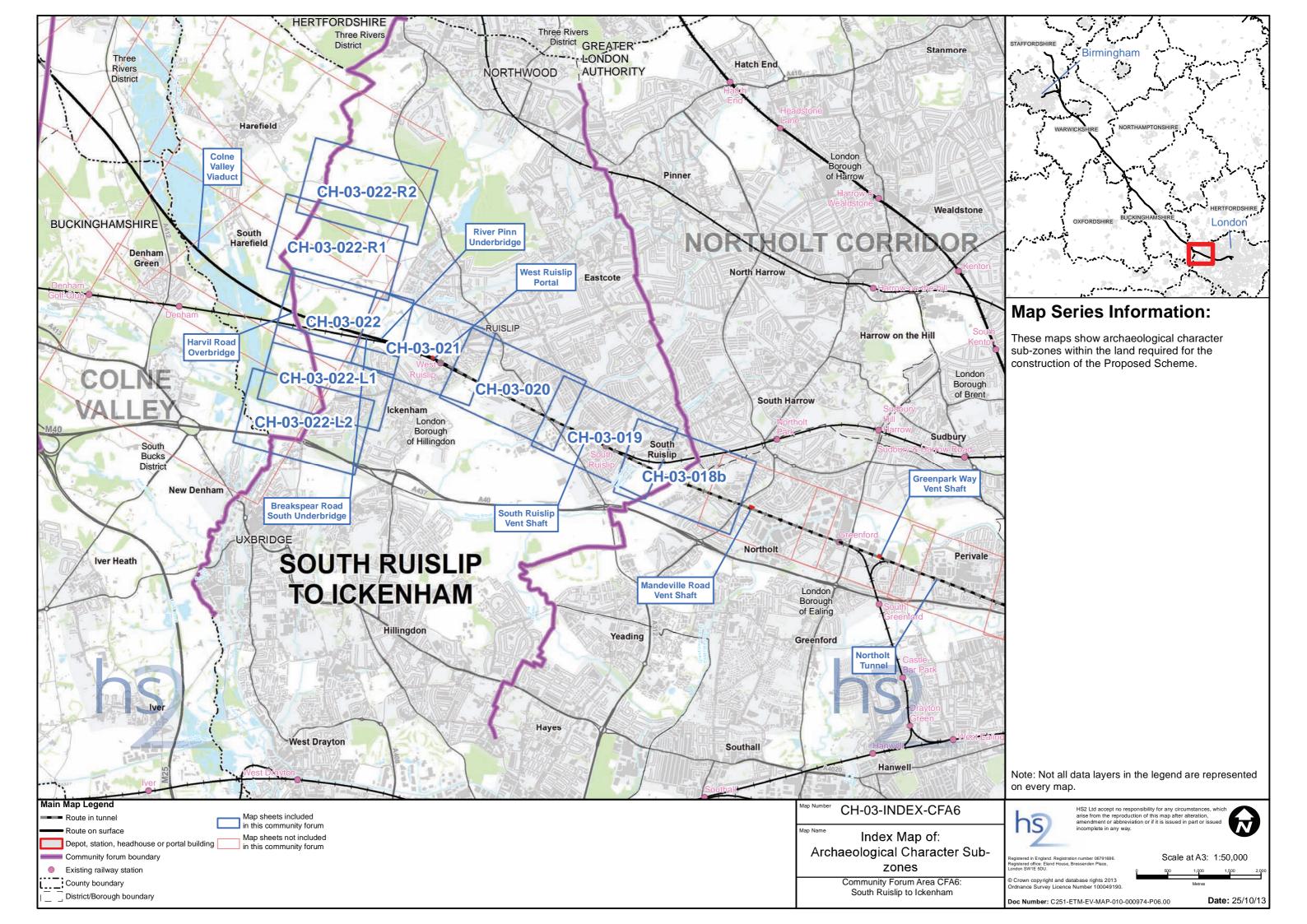


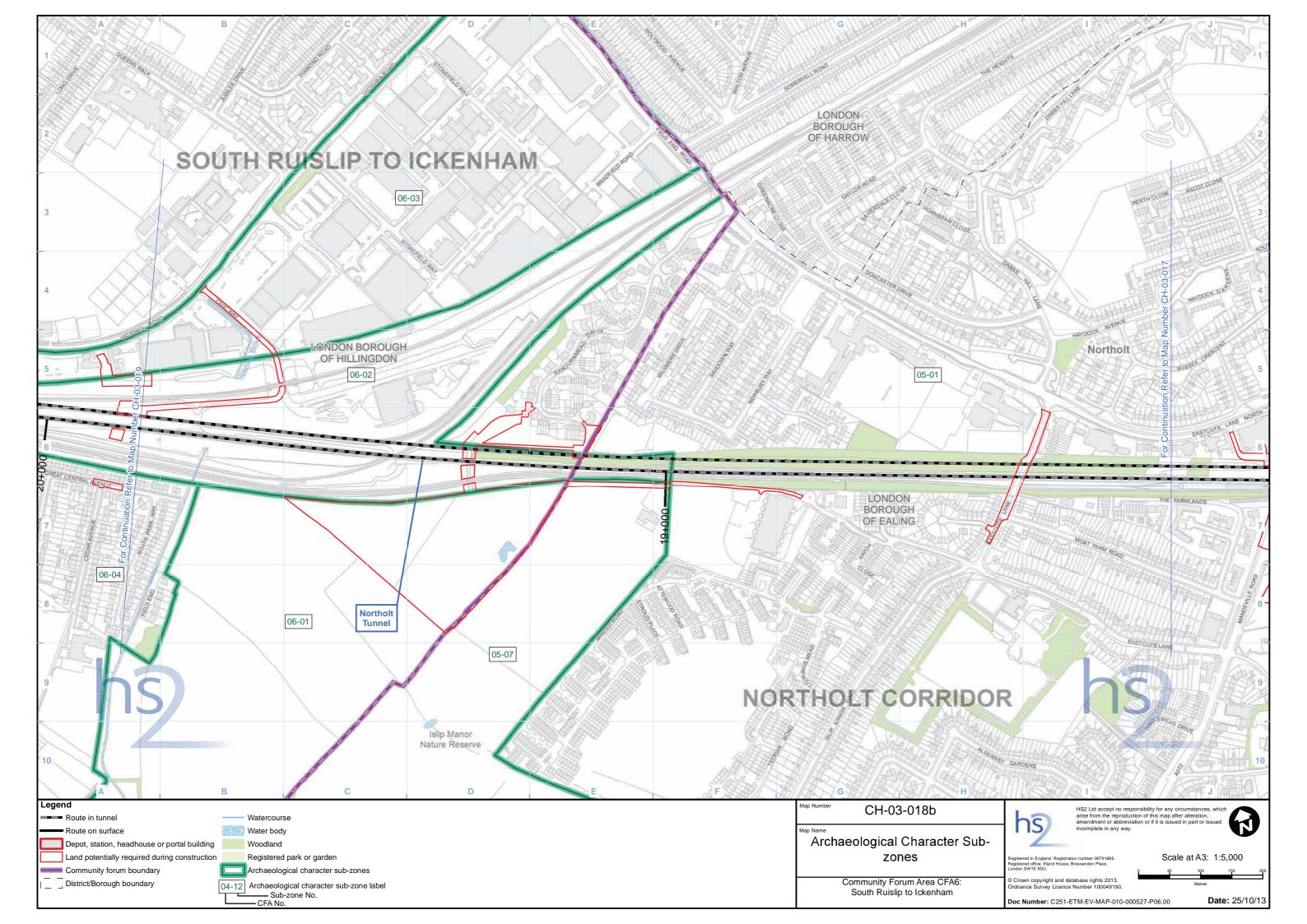


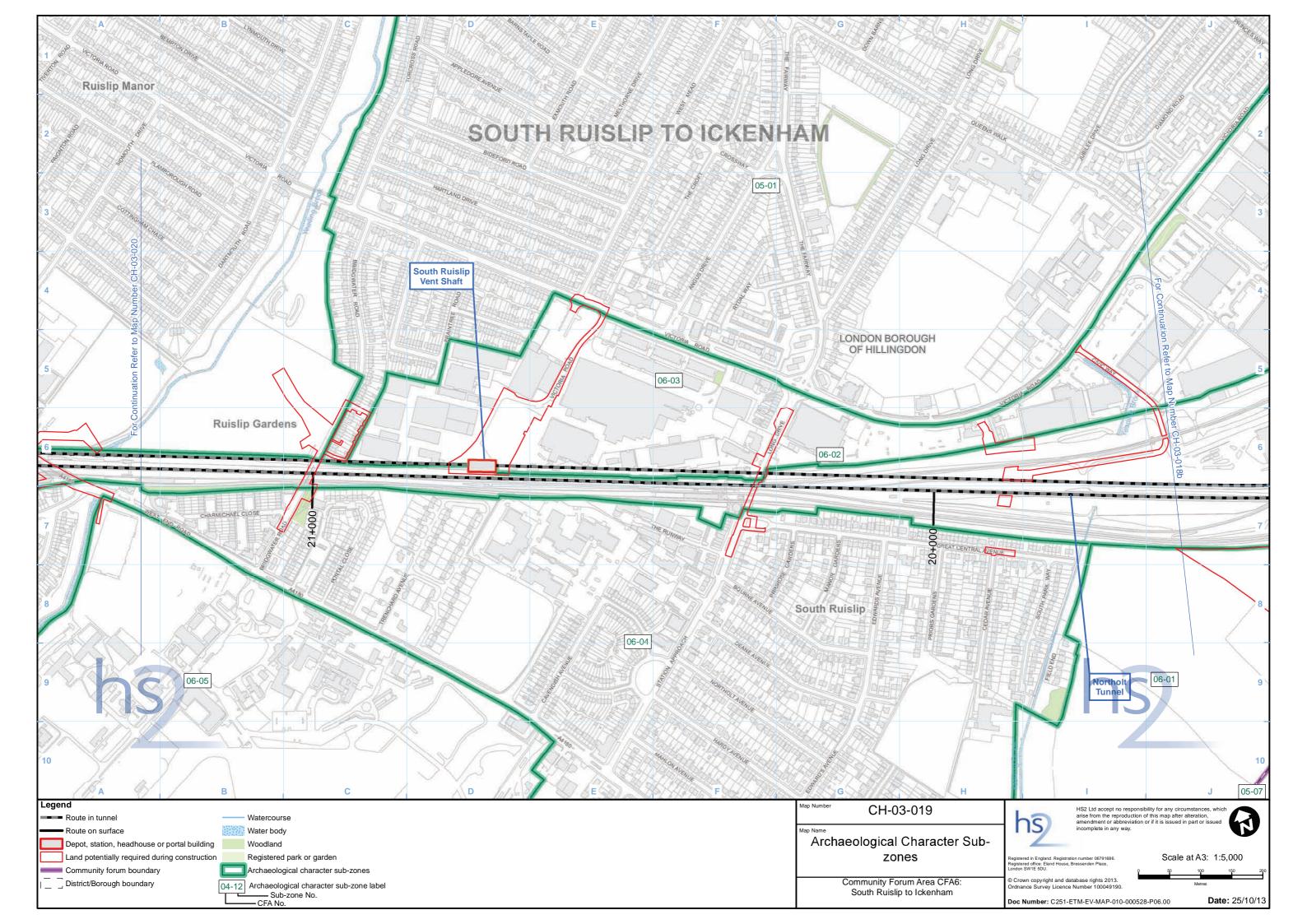


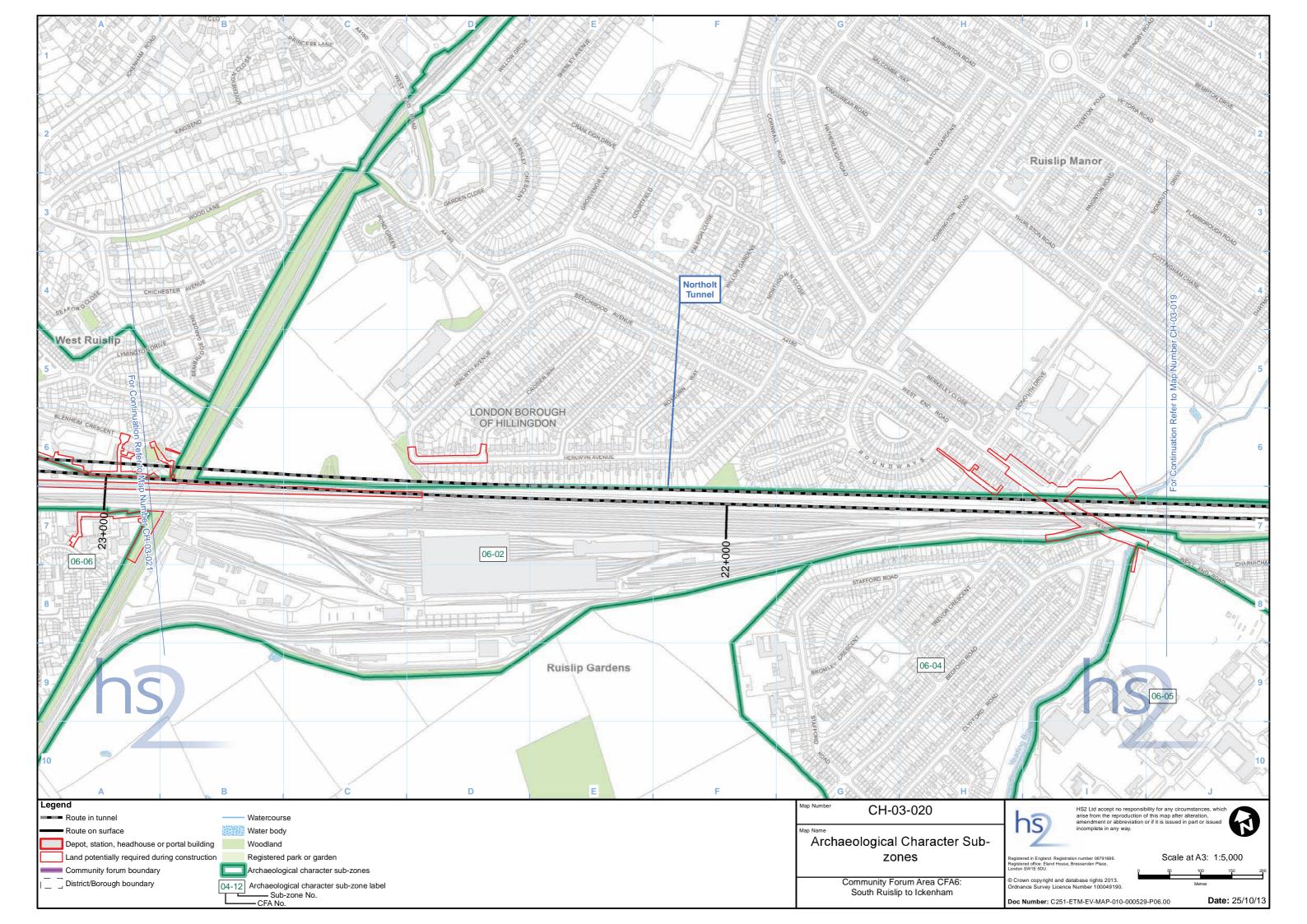


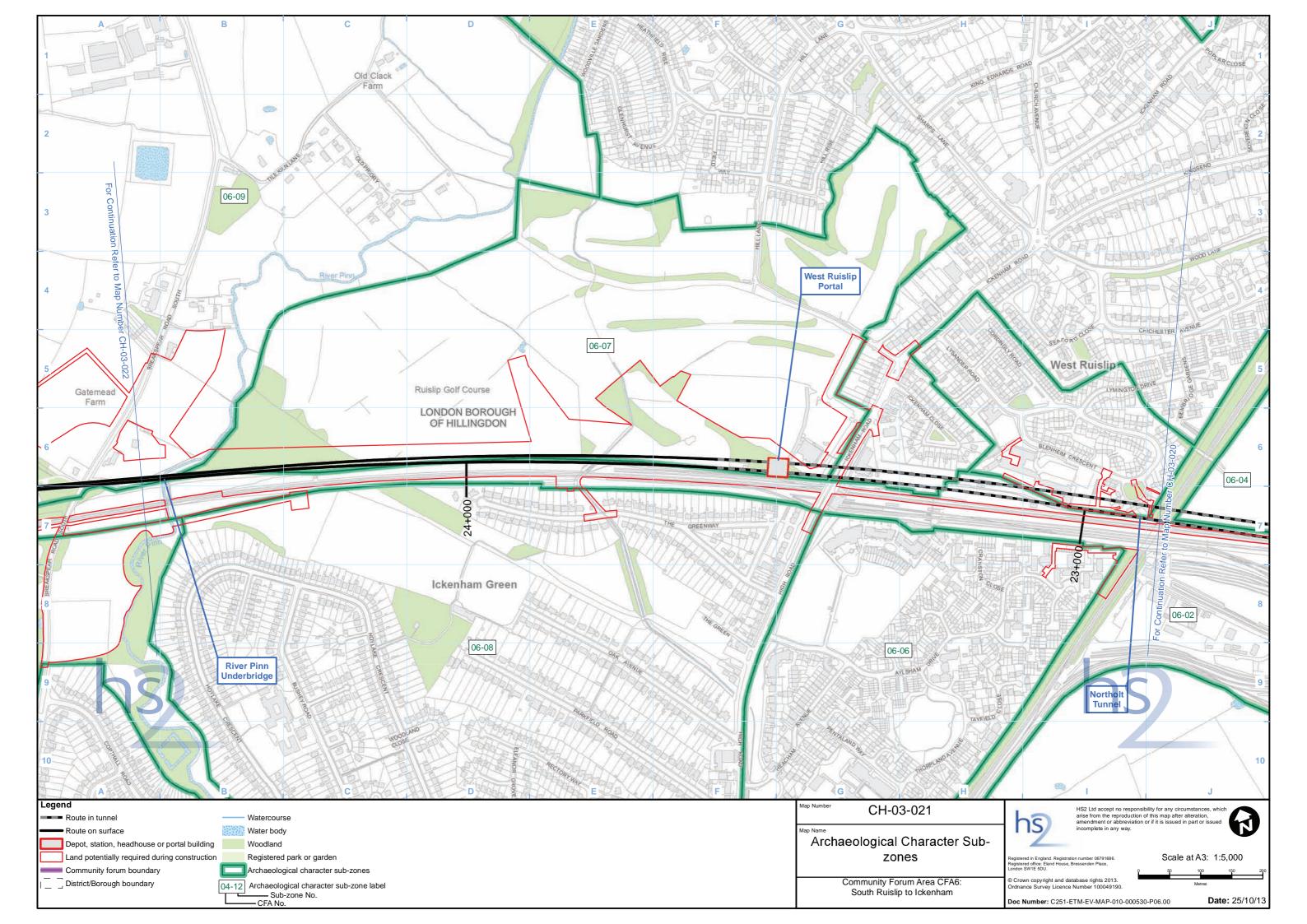
This page is left intentionally blank

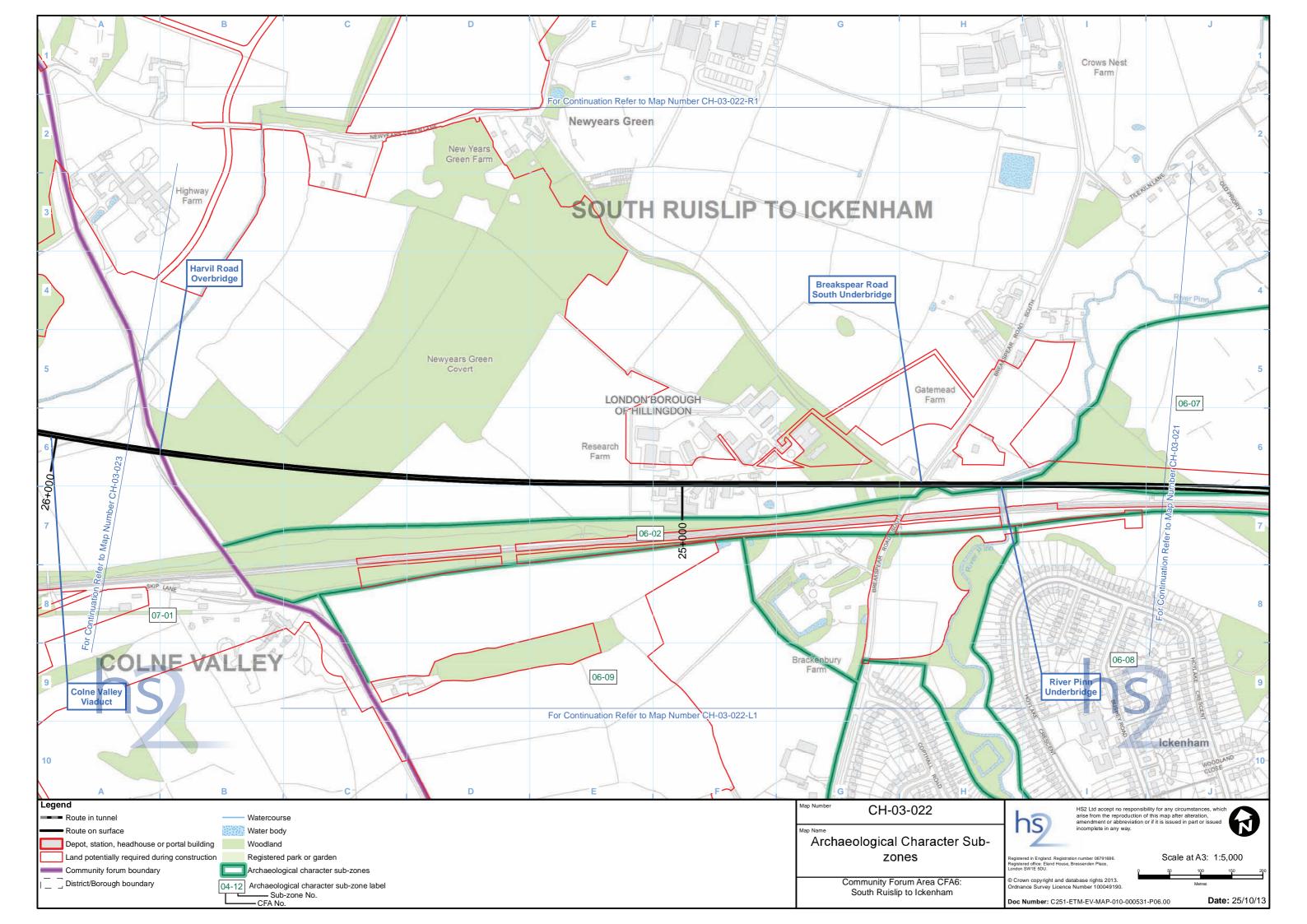


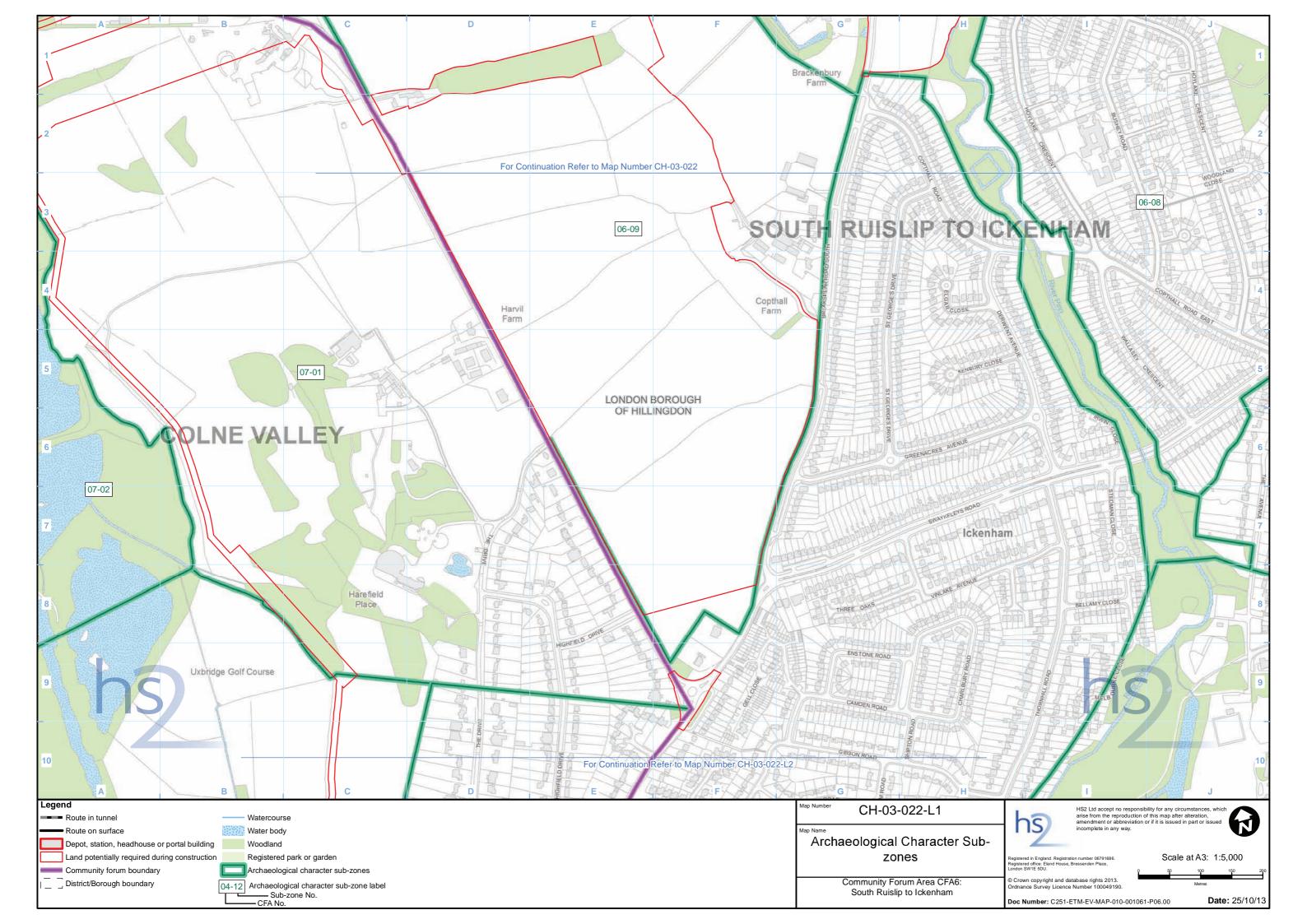


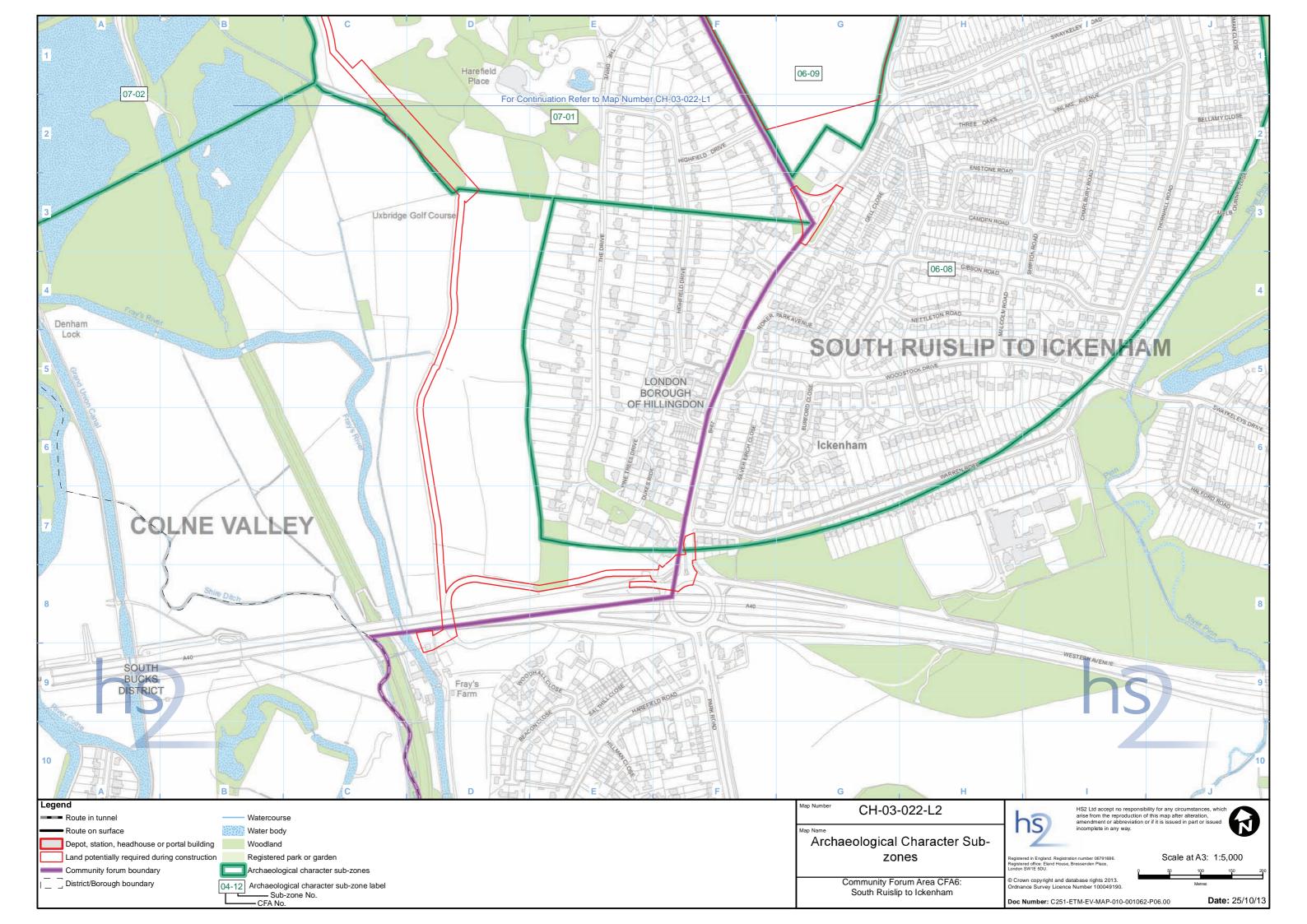


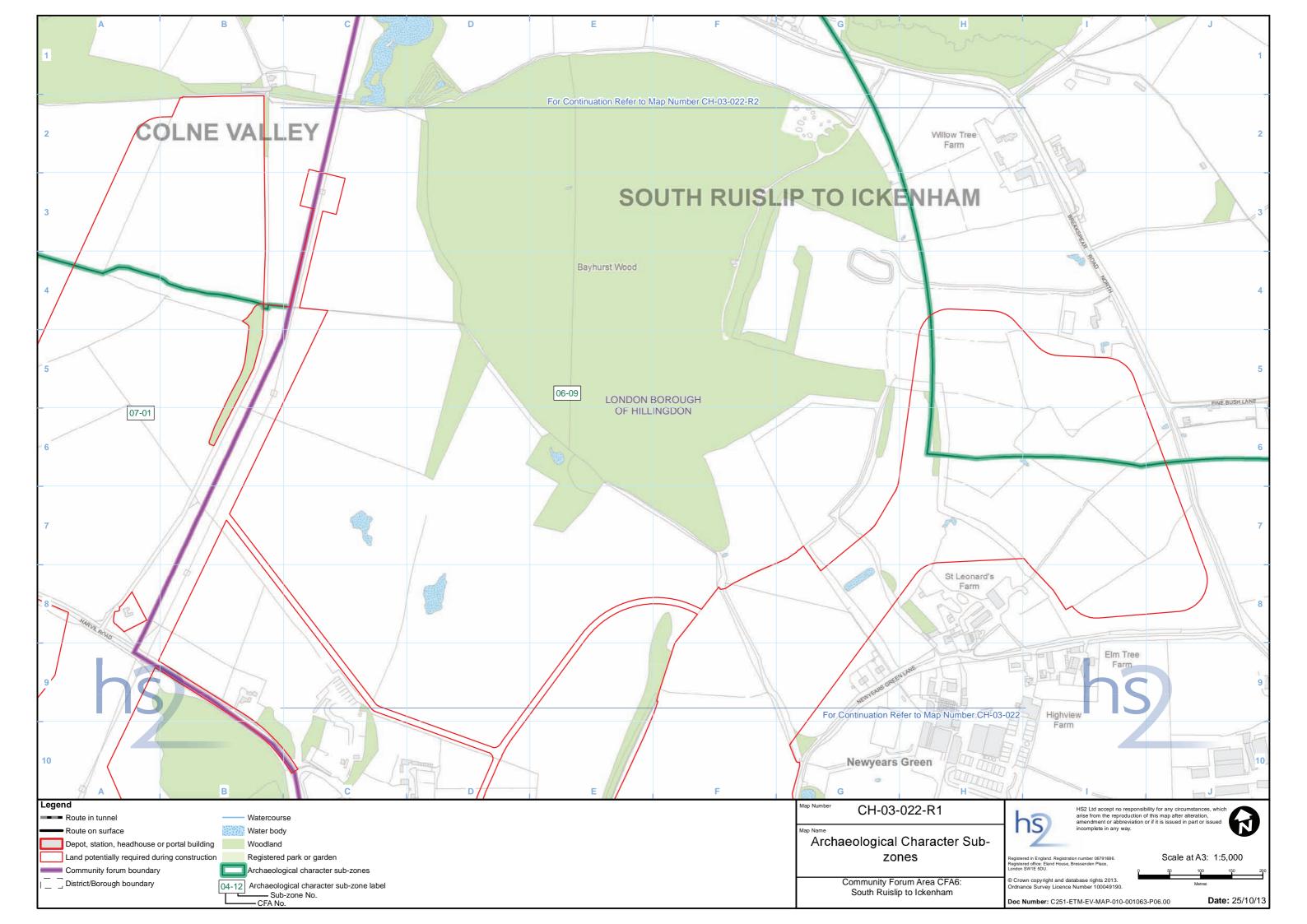


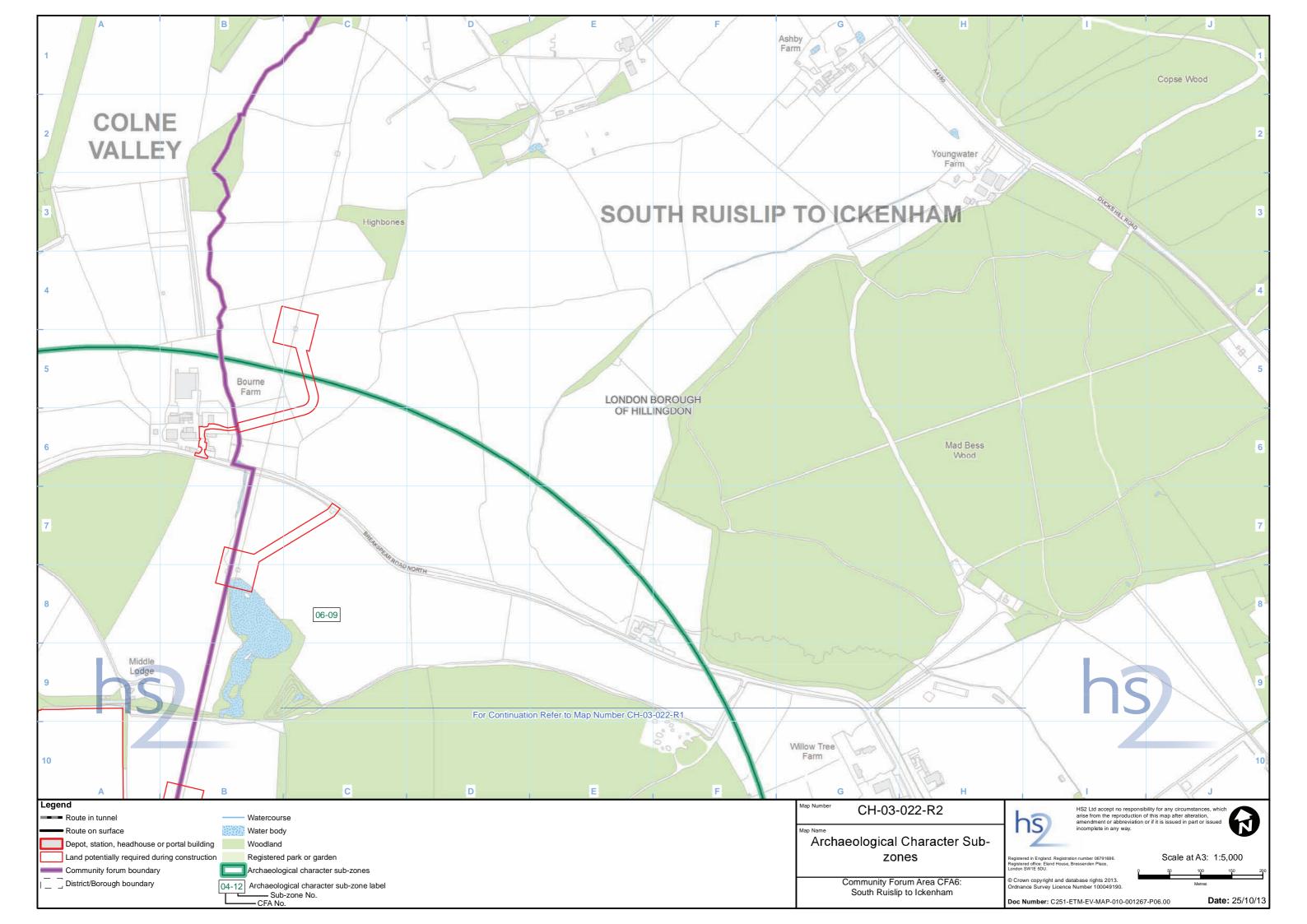












This page is left intentionally blank